This document has been approved for public release and sale; its distribution is unlimited.

AD 659343

TECHNICAL REPORT 6%-1

BIBLIOGRAPHY OF TECHNICAL PUBLICATIONS AND PAPERS

July 1966 - June 1967

August 1967

U. S. ARMY NATICK LABORATORIES Natick, Massachusetts 01760

FOREWORD

This bibliography is a list of technical publications and papers by personnel of the U. S. Army Natick Laboratories and its contractors for the period July 1966 through June 1967.

Reprints of journal articles, in some cases, are available from the individual authors. Copies of technical reports may be obtained from (1) the Defense Documentation Center, Cameron Station, Alexandria, Virginia 22314, or (2) the Clearinghouse for Federal Scientific and Technical Information, Springfield, Virginia 22151. The "AD" number should be cited when ordering copies of reports. Those reports marked with an asterisk (*) are not available for distribution outside the agencies of the Department of Defense.

W. M. MANTZ
Brigadier General. USA
Commanding

Contents

	Page
Office of the Commanding General	1
Office of Deputy Commander	1
Office of Scientific Director	2
Technical Library	4
Airdrop Engineering Laboratory	5
Clothing and Organic Materials Laboratory	6
Earth Sciences Laboratory	15
Food Laboratory	20
General Equipment and Packaging Laustatory	35
Pronecting Research Laboratory	39
Index to authors	51

The state of the s

ABSTRACT

A bibliographic listing of technical publications and papers by the personnel of the U. S. Army Natick Laboratories and its contractors for the period July 1966 chrough June 1967.

U. S. ARMY NATICK LABORATORIES

COMMANDING GENERAL

Technical Papers

- MANTZ, W. M. Aerial delivery systems and aircraft crew protection system. Advanced Planning Briefings for Industry Seminar, Army Aviation Association of America and U. S. Army Aviation Materiel Command, St. Louis. Mo., 20 June 1967.
- 2. Human engineering. Man-Mobility-Survivability rorum,
 Allison Division of General Motors, Indianapolis, Ind.,
 11-12 April 1967.
- 3. A look into the future, Officer Candidate Class o7-2 Graduation, U. S. Army Quartermaster School, Fort Lec., Va., 19 January 1967.
- A. Management and operational activities at U. S. Army Natick Laboratories. Installation Management Course, Class 2, U. S. Army Management School, Fort Belvoir, Va., 24 October 1966.
- 5. New developments of Army equipment. Signal Officers'
 Basic Course, U. S. Army Southeastern Signal School, U. S. Army
 School/Training Center, Fort Gordon, Ga., 13 January 1967.
- 6. Research and development management at U. S. Army Natick Laboratories. Research and Development Management Orientation Course, U. S. Army Logistics Management Center, Fort Lee, Va., 7 April 1967.
- 7. U. S. Army Natick Laboratories in 1976. Research
 Society of America, Natick. Mass., 29 August 1966.

DEPUTY COMMANDER

Technical Papers

8. RIORDAN, C. T. Relarks. Industrial Security Requirements Seminar for Contracting Officers, U. S. Army Natick Laboratories, Natick, Mass., 11 October 1966.

DEPUTY COMMANDER

Technical Papers (continued)

- 9. RIORDAN, C. T. Remarks. Meeting of the Radiological Officers, Office of Civil Defense, U. S. Army Natick Laboratories, Natick, Mass., 23 May 1967.
- U. S. Army Natick Laboratories item development for U. S. Troops in Southeast Asia. Quartermaster Officer Basic Course, Class 67-3 Graduation, U. S. Army Quartermaster School, Fort Lee, Va., 17 November 1906.
- 11. U. S. Army Natick Laboratories Program management of personnel, equipment, and relations with Congress. Conference on Organometallic Chemistry, U. S. Army Natick Laboratories, Natick, Mass., 2 May 1967.
- Packaging for soldier oriented supplies for Southeast Asia and the Natick Laboratories. Methodist Church, Maynard, Mass., 17 April 1907.
- Packaging in Vietnam. Defense Supple Association Fall Meeting, U. S. Army Natick Laboratories, Natick, Mass., 26 October 1960; Practical Package Development Trends in Military Package Management Seminar, Engineering Institute, University of Wisconsin, Madison, Wis., 9 May 1967.
- 14. Report of Packaging Assistance Team Visit to Southeast Asia. Third Annual AMC Storage Management Conference, Arlington, Va., 6 December 1966.
- 15. You have never had it so good logistically forget the "good old days." Army Supply Officer Class 67-8 Graduation, U. S. Army Quartermaster School, Fort Lee, Va., 28 April 1967.

OFFICE OF SCIENTIFIC DIRECTOR

Technical Papers

10. FLANAGAN, J. H. Coupling research to design. Technical Working Group, Design Coupling, Fort Belvoir, Va., 7 December 1966.

OFFICE OF SCIENTIFIC DIRECTOR

Technical Fapers (continued)

- 17. OESTERLING, J. F. The friendly and unfriendly natural environment. Tennessee Junior Science and Humanities Symposium, University of Tennessee, Knoxville, Tenn., 3. March 1967.
- 18. SIELING, D. H. Advancement in food preservation. Epicurean Club of Framingham, 1812 House, Framingham, Mass., 13 March 1967.
- 19. Activities at U. S. Army Natick Laboratories. Natick
 Service Council, Fiske Memorial Church, Natick, Mass., 13 April
 1967.
- 20. New foods and packaging developed at U. S. Army Natick Laboratories. Seventeenth School Lunch Workshop, Mt. St. Mary College, Fookset, N. H., 1 September 1966.
- 21. The combat soldier's needs, an engineering challenge.

 Southern Arizona Chapter of the Arizona Society of Professional Engineers, University of Arizona, Tucson, Arizona, 14 February 1967.
- 22. The combat soldier's needs, a research challenge.

 Newton Rotzzy Club, Brae Burn Country Club, Newton, Mass.,

 10 October 1966.
- 23. Thoughts for food. Worcester Engineering Society
 (Ladies Night), Pleasant Valley Country Club, Sutton, Mass.,
 13 October 1966.

Technical Reports

to a second out make the second

24. On membrane frequencies for spherical shell vibrations, E. W. ROSS, JR., 67-74-OSD, May 1967 (AD 651475).

TECHNICAL LIBRARY

Technical Reports

- 25. Applications of microwave heating to food processing and cookery. E. G. BEARY. Bibliographic Series c7-2. February 1967.
- 20. Moisture equilibrium in relation to the chemical stability of dehydrated foods, E. G. BEARY. Bibliographic Series 67-1 January 1967.
- 27. Selective dissemination of information (SDI): Vol. 1, Pilot test at U. S. Army Natick Laboratories, Information Dynamics Corp., Contract No. DA19-129-AMC-957(N). 14 May 1967 (AD 654997).
- 28. Selective dissemination of information (SDI): Vol. 2, Implementation manual, Information Dynamics Corp., Contract No. DA19-129-AMC-957(N). 13 June 1967 (AD 654496).
- 29. Selective dissemination of information: Review of selected systems and a design for Army technical libraries, W. A. RIVONA and E. J. GOLDBLUM, Information Dynamics Corp., Contract No. DA19-129-AMC-957(N). August 1906 (AD 636910).
- 30. Technical and medical research libraries and information centers of the Department of the Army, R. I. MARTIN. ATLIS Report No. 1, September 1966 (AD 655535).

Technical Papers

- 31. MARTIN, R. L. Library amployee development, Tenth Annual Military Librarians' Workshop, San Diego, Calif., 13 October 1966.
- and W. A. BIVONA (Information Dynamics Corp.), A
 library system for selective dissemination of information.
 First ATLIS Workshop: Automation in Libraries, Redstone
 Scientific Information Center, Redstone Arsenal, Ala..
 16 November 1966.

AIRDROP ENGINEERING LABORATORY

Technical Reports

- Design of cushioning systems for airdrop, M. P. GIONFRIDDO. 67-59-AD, February 1967 (AD 055280).
- 34. Feasibility study for an ultimate personnel/cargo lowering and retrieval system for the CH-47 Helicopter, G. D. DeSANTIS.

 ADEL Report, unnumbered, 15 August 1966.
- 35. Lowering device, personnel/cargo, 500-1b capacity and tiedown assembly aircraft floor anchor for UH-1B, UH-1D, and CH-34 Helicopter, E. LUNSFORD. Advance Data Package, 27 March 1967.
- 36. Release assembly parachute ripcord, automatic free-fall, Type FF-! and Stopwatch, parachutist's with 5-minute register, E. LUNSFORD. Advance Data Fackage, 5 April 1967.

Technical Papers

- 37. BUDNICK, M. L. Data and equipment for process control of expanded paper honeycomb energy dissipater material. Symposium on Correlation of Material Characteristics with Systems Performance, Technical Cooperation Program, Orlando Air Force Base, Florida, 12 May 1967.
- 38. DeSANTIS, G. C. Feasibility study for an ultimate personnel/carge lowering and retrieval system for the CH-47 Helicopter. National Aerospace Electronics Conference (NAECON), Dayton, Ohio, 17 May 1967.
- 39. FALABELLA, G. U. S. Army airdrop program. Air Standardization Coordinating Committee Working Party 44 (Air Transport Systems), Canberra, Australia, 12-20 December 1966.
- 40. GIONFRIDDO, M. P. Engineering problems in airdrop. Mechanical Engineering Department, University of Rhode Island, Kingston, R. I., 10 November 1966.
- A survey of the t. S. Army R&D programs in airdrop,
 Aerodynamic Deceleration Systems Conference, American Institute
 of Aeronautics and Astronautics, Houston, Texas, 7-9 September
 1966.

Technical Reports

- 42. Appraisal of white marking media for application on Air Force blue cotton webbing, A. P. SNYDER and T. KAPALA. 67-21-CM (MRE 67-1). September 1966 (AD 645970).
- 43. Behavior characteristics of a caliber .30 AP projectile after penetrating biaxially stretched acrylic, J. R. PETERS. Armor Material Examination Report No. 8339, March 1967,
- 44. Comparative study of picker and draw-frame blends of cotton and nylon, S. D. SHAHANE, V. SINGH, and L. I. WEINER. 67-22-CM (TS-143), November 1966 (AD 645153).
- 45. Design tables for textile fabrics: tables of solutions or equations for maximum wearability fabrics made from single liber species and blends. L. I. WEINER. 67-20-CM (TS-144). August 1966 (AD 640502).
- 46. Development, fabrication, and prooftesting of optimum foo: protection against antipersonnel mines using a supplementary device. E. S. FUJINAKA and J. L. McDONALD, IIT Research Institute. Contract No. DA19-129-QMC-379(N). 67-45-CM (TS-14)), December 1966 (AD 813883).*
- 47. Development of a carbon heating unit, M. J. McGOFF and W. MILICH.
 Mine Safety Appliance Research Corp., Contract No. DA19-124AMC-105(N). 67-13-QM (MR&E 60-3), July 1960 AD 642930).
- 48. The development of a combat book last for Than and Vietnamese military forces, D. SWAIN and R. J. McLEAN. APPA report, 67-81-CM, May 1967.
- 49. Development of an inorganic phototropic system for flashblindness protection, A. M. MARKS, Marks Polarized Corp., Contract No. DA19-129-AMC-158(N), 17-2-CM (C&OM-22), July 1966 (AD 639701).
- 50. Development of charcoal impregnation process for CW protective overgarment, D. D. GAGLIARDI, Gagliardi Research Corp. Contract No. DA19-129-AMC-675(N). Final Report, October 1966 (AD 805099).*

Technical Reports (continued)

- 51. Effectiveness of aviators' garments in protecting against gasoline fires, E. T. WALDRON, M. DiPAOLO, W. KOZA, H. MADNICK, and D. DALUZ. C&OM Laboratory report, February 1967.
- 52. Effects of dynel fiber blending on yarn shrinkage and woven fabric properties, P. J. ANGELO, JR., D. H. PFISTER, J. A. GOODWIN, and V. DUXBURY, Lowell Technological Institute Research Foundation, Contract No. DA19-129-AMC-894(N). 67-64-CM (TS-150), January 1967.
- 53. Electrically heated handwear, H. MADNICK and A. PARK, 67-82-CM (C&ED-46), March 1967.
- 54. Evaluation of 5-gallon experimental water container, F. RAMSDELL, C&OM Laboratory report, August 1965.
- 55. Evaluation of Swedish helpet for tank or wmen. A. L. LASTNIK, 67-39-CM (C&ED-44), November 1966 (AD ***)
- 56. Feasibility of using fluorescent colorants to afforc camouflage protection against photographic detection, A. O. R MSLEY and J. T. WALWOOD. 67-26-CM (TS-145) October 1966 (A: 653604).
- 57. Feasibility study of personnel shirt-sleeve clothing and disposal, M. E. DARBY. NASA, Order L-67, 067, M.S. 138. Fin ' Progress Report, Phase II, December 1966.
- 58. Lightweight insulated footwear, R. POOLEY, L. FISHE, A. SHAW III, and C. S. ROHS, U. S. Rubber Co., Contract No DA 9-129-AMC-690(N). 67-23-CM (C&CM-26), September 1966 (AD 640629).
- 59. Low temperature traction rubber sole compound for MS combat footwear. V. JAVIER. 67-72-CM (C&CM-3), January 18.7.
- 60. Methods for removal of hard-water scale from U. S. Army kitchen equipment, T. KAPALA and G. J. MERRITT, 67-83- M (C&OM-32), March 1967 (AD 654378).
- 61. Physical and rheological properties of fluoronit osc rubbers, G. L. BALL III, I. O. SALYER, J. V. PUSTINTER, at J. H. S. WILSON, Monsanto Research Corp., Contract No. DA19-126-/ (C-151(N)), Final Report, 67-63-CM (C&CM-31), April 1967.

Technical Reports (continued)

- 62. Point system for evaluating quality in textiles, H. J. McISAAC. 67-29-CM (TS-146), October 1966 (AD 641496).
- 63. Polymerization studies leading to high-strength chemical resistant elastomers serviceable at temperature extremes, D. I. RELYEA, H. P. SMITH, and A. N. JOHNSON, U. S. Rubber Co.. Contract No. DA19-129-AMC-487(N), Semiannual Report No. 4, 67-58-CM. December 1906 (AD 648860).*
- 64. Fotential military applications of disposable items a review of NLABS activities, 1959-1907. M. E. DARBY, May 1967.
- 65. Punch-card information retrieval systems for flashblindness protection research. I. Photochromic materials R. N. MacNAIR. 67-14-ON (C&OM-24), November 1966 (AD 643772).
- 66. Research and development of blast protective footwear, fabrication and proof-testing, E. S. FUJINAKA and J. L. MacDONALD, IIT Research Institute, Contract No. DA19-129-QM-2061 (OI 6137) 67-5-QM (TS-141), July 1966 (AD 648417).
- 67. Research design study of variable armor concepts, R. RODZEN, F. SCRIBAND, M. BURNS, and E. BARRON, IIT Research Institute, Contract No. DAIG-129-AMC-555(N) 67-40-CM (TS-148), September 1966 (AD 814379).*
- 68. Research on synthesis of unsaturated fluorocarbon compounds, P. TARRANT, F. DRAKESMITH, O. J. STEWART, J. P. TANDON, S. MISAKI, D. SAYERS, J. HEYES, W. OLIVER, A. C. WRIGHT, D. PERRY, and A. WRICHT, University of Florida, Contract No. DA19-129-AMC-74(N), Semianrual, No. 7, 67-60-CM, September 1960 (AD 649346), and Final Fepcrt, 67-79-CM (C&CM-33), March 1967.
- 69. Research study on cold drawing phenomena in high polymers, R. D. ANDREWS, JR., S. W. ALLISON, D. H. ENDER, R. M. KIMMEL and W. WHI'NEY. Massachusetts Institute of Technology, Contract No. DA19-129-AMC-238(N). 67-10-CM (C&CM-35). August 1966 (AD 644021).
- 70. Response of non-woven synthetic Tiber textiles to ballistic impact.
 T. P. IPSON and E. P. WITTROCK, Coloredo Seminary, Contract
 No. DA19-129-AMC-157(N). 67-8-CM (TS-142), July 1966 (AD 541433).

Technical Reports (continued)

- 71. A review of photochromism in triphenylmethane derivatives and related compounds, R. N. MacNAIR. 67-51-CM (C&OM-29), January 1967 (AD 654798).
- 72. Sorption and diffusion of water in a rubbery polyurethane, N. S. SCHNEIDER, L. V. DUSABLON, H. B. HOPFENBERG, L. A. SPANO, and F. VOTTA, JR., NASA R-135, Status Report No. 7, December 1966.
- 73. Studies on the structure of rubbery polyurethanes, N. S. SCHNEIDER, S. B. CLOUGH, and L. A. SPANO, NASA R-135. Status Report No. 8. 67-77-CM (MRF-67-2). January 1967.
- 74. Study of the surface emissivity of textile fabrics and materials in the 1 to 15µ range, M. MASON and I. COLEMAN, Block Engineering Co., Contract No. DA19-129-AMC-523(N). 67-86-CM (TS-151), March 1967.
- 75. Synthesis of chromotropic colorants: Part II, R. A. COLEMAN, J. KAZAN, M. VEGA, and M. MASON, American Cyanamid Co., Contract No. DA19-129-AMC-269(N). 67-33-CM (TS-147), February 1967 (AD 808708).*
- 76. Synthesis of organolead compounds, M. C. HENRY and B. PANT, Quarterly Reports No. 21, September 1966, No. 22, December 1966, and No. 23, May 1967.
- 77. The synthesis of special fluorine-containing monomers, J. D. PARK and J. R. LACHER, University of Colorado, Contract No. DA19-129-AMC-869(N), Semiannual Report No. 2, 67-48-CM, 15 December 1966 (AD 645432).
- 78. Theoretical and experimental study of low-velocity penetration phenomena, E. T. CANNON, Utah Research and Development Co., Inc., Contract No. DA19-129-AMC-150(X), Final Report, November 1966.

Journal Articles

79. BURROWS, W. D. Clarke-Eschweiler cyclization. Scope and mechanism. J. Organic Chem., 31:3099 (1966).

Journal Articles (continued)

- 80. BURROWS, W. D. Mesoionic exazolones. A new synthesis and electrophilic substitution reaction. J. Organic Chem., 31:3435 (1966).
- 81. DAVIDSOHN, W., and M. C. HENRY. Organometallic acetylenes of the main groups III-V. Chem. Rev., 67:73 (February 1967).
- 82. DESPER, C. R., and R. S. STEIN. Measurement of pole figures and orientation functions for polyethylene films prepared by unidirectional and oriented crystallization. J. Appl. Phys., 37(11):3990 (October 1966).
- 83. KOERNER von GUSTORF, E., M. C. HENRY, R. E. SACHER, and C. DiPIETRO.
 Radiation chemical reductions of aromatic nitro compounds with
 Fe(CO)₅. Zeitschrift fur Naturforschung, 21b:12 (1966).
- 84. LALIBERTE, B., W. DAVIDSOHN, and M. C. HENRY. Some reactions of di-n-butyltin dihydride. J. Organometallic Chem., 5:526 (1966).
- 85. PROSSER, R. A., J. T. STAPLER, and W. E. C. YELLAND. A pyrolysis oven which utilizes a preheated helium stream. Analytical Chem., 39(6):694-695 (May 1967).
- 86. RAMSLEY, A. O. Fluorescence of dyes in the infrared. Color Engineering, 5(1):20-24 (1967).
- 87. Measurement of infrared fluorescence of surfaces, J. Opt. Soc. Amer., 57:111-.J2 (1967).
- 88. SACHER, R., D. H. LEMMON, and F. A. MILLER. Infrared and raman spectra of Si(CECH)₄, Ge(CECH)₄, and infrared spectrum of Sn(CECH)₄. Spectrochimica acta, Vol. 23A, No. 5 (May 1967).
- 89. SELIGSBERGER, L. Vulcanized boots for combat footwear. J. Amer. Leather Chem. Assn., 62(5):346-360 (May 1967).
- 90. STEIN R. S., P. F. ERHARDT, S. B. CLOUGH, and G. ADAMS. Scattering of light by films having nonrandom orientation fluctuations.
 J. Appl. Phys., 37(11):3980 (October 1966).
- 91. WILSON, A. Measurement of the elasticity of rubber at low temperatures using a twist apparatus. Rubber World, 156(1):81-80 (April 1967).

Technical Papers

- 92. BURROWS, W. D. The effect of structure on the rates of thermal decomposition of solid benzyldimethylsulphonium salts. American Chemical Society, Miami Beach Fla., April 1967.
- 93. CLOUGH, S. B., and N. S. SCHNEIDER. Structural studies on polyurethane elastomers. Northeastern Section. Plastics and Elastomers Group, American Chemical Society. Cambridge, Mass., 9 March 1967.
- 94. and N. S. SCHNEIDER. Structural studies on polyurethane elastomers. Division of High Polymer Physics, American Physical Society, Chicago, Ill., 29 March 1967.
- 95. DESPER, C. R. Structure and properties of extruded polyethylene films. Northeastern Section, Plastics and Elastomers Group. American Chemical Society, Cambridge, Mass., 9 March 1967.
- 96. The mathematics of the polarized fluorescence experiment.

 Division of High Polymer Physics, American Physical Society,
 Chicago, Ill., 29 March 1967.
- 97. HENRY, M. C. First International Conference on Organolead Chemistry and Its Applications, U. S. Army Natick Laboratories, Natick, Mass., 2 May 1967.
- 98. KENNEDY, S. J. Boots, clothing, and body armor for our troops in Vietnam, University of Rhode Island, Kingston, R. I., 2 November 1966
- 99. Functional design in military clothing. University of Connecticut, Storrs, Conn., 15 December 1966.
- 100. Military textiles and clothing changing needs.

 Northern Textile Association, West Harwich, Mass., 29 September 1966.
- 101. Textiles and clothing for our troops in Vietnam.

 Textile Dinner Club, Boston, Mass., 8 December 1966.
- The role of textiles in military operations today.

 Textile Research Institute, New York, N. Y., 6 April 1967.

- 103. KENNEDY, S. J. The textile technologist in a consumer world. University of Rhode Island, Kingston, R. I., 3 January 1967.
- 104. KLIMAN, M. I. Ceramic personnel armor specifications. Ceramic Semirar, New York, N. Y., 17 November 1966.
- 105. MARTIN, D. M. A scanning method for photoelasticity. American Ceramic Society, New York, N. Y., 5 May 1967.
- 106. MacNAIR, R. N. Photochromic materials and mechanisms. Informal Committee for Eye Protection against Lasers U. S. Army Natick Laboratories, Natick. Mass., 24 May 1907.
- 107. McQUADE, A. J. Fire-resistant textiles American Association of Textile Chemists and Colorists, Danvers, Mass., 20 May 1907.
- 108. MILES, T. D. Flame-resistant textiles. Symposium on Burns and Flame-Resistant Textiles, New York Academy of Medicine, New York, N. Y., 14 December 1966.
- 109. PIROG, J. A., A. W. BERGER, and R. H. JACKSON (Monsanto Research Corp.). The flash photolysis of tetrakis-(p-octylphenyl)-hydrazine. Informal Symposium on Reversible Photochemical Processes Dayton, Ohio. 1-3 May 1967.
- 110. SACHER, R. E. Infrared and raman spectra of Si(CECH)₄. GeoCECH)₄. and Sn(CECH)₄. Symposium on Molecular Structure and Spectroscopy, Columbus, Ohio. 6-10 September 1966.
- 111. SCHNEIDER, N. S., R. TRASKOS, and A. HOFFMAN. Column fraction of branched polyethylenes. Northeastern Section. Plastics and Elastomers Group, American Chemical Society. Cambridge. Mass. 9 March 1967.
- 112. , R. TRASKOS, and A. HOFFMAN. Column fractionation of branched polyethelenes. Polymer Research Institute. Amherst. Mass., 26 May 1967.
- 113. , L. V. DUSABLON, and L. SPANO. Water vapor transport in polyurethanes. Symposium on Coated Fabrics, U. S. Army Engineer Research and Development Laboratories, Fort Belvoir. Vol., 17 April 1967.

- 114. SHURTLEFF, S. J. Substrate coating adhesion. Symposium on Coated Fabrics, P. S. Army Engineer Research and Development Laboratories. Fort Belvoir, Va., 18 April 1967.
- 115. SPANO, L. Thermoelectric powered heating and ventilating system. International Electronic Devices Meeting, Washington, D. C. 26-28 October 1966.
- 116. URBANEK, J. P. Adhesive seaming problems. Symposium on Coated Fabrics, Panel P-3, Organic Materials, The Technical Coopers on Program, U. S. Army Engineer Research and Development Laboratories, Fort Belvoir, Va., 18 April 1967.
- 117. WELLS, R. D. Information access and retrieval. The Fiber Society, Asheville, N. C., 5 May 1967.
- Patterns of flow of technical information. A design problem for the textile industry. Textile Research Institute. New York, N. Y., 5 April 1967.
- 119. WILDE, A. F. Dynamic birefringence and strain produced in two transparent polymer. by mechanical impact. Sixth International Symposium on High Speed Testing: The Rheology of Solids, Boston, Mass., 7 March 1967.
- Dynamic photoelasticity. New England Section. Society for Experimental Stress Analysis, Newton, Mass., 7 December 1966.
- 121. WILSON, A. Low temperature testing of elastomers. Northeastern Section, Elastomers and Plastics Group, American Chemical Society Newton, Mass., January 1967.
- Measurement of the elasticity of rubber at low temperatures using a twist recovery apparatus. American Chemical Society, New York, N. Y., 14-16 September 1966.
- 123. YELLAND, W. E. C. Inorganic phosphora and image converter systems.

 Informal Committee for Eye Protection against Lasers, U. S. Army
 Natick Laboratories, Natick, Mass.. 24 May 1967.

Book Chapters

124. SCHNEIDER, N. S. Structure properties relations in high polymers.

In Chapter 2, R. W. Lenz, Organic Chemistry of High Polymers.

Interscience Publishers, New York, N. Y. (1967).

Technical Reports

- 125. Arthropods of medical importance in Africa, part I and II, B. V. TRAVIS, C. E. MENDOZA, and R. M. LABADAN, Cornell University, Contract No. DA19-129-AMC-417(N). 67-55-ES (ES-31), February 1967 (AD 650931 and AD 650949).
- 126. Arthropods of medical importance in Asia and European U.S.S.R., part I and II, B. V. TRAVIS and R. M. LABADAN, Corneil University, Contract No. DA19-129-AMC-417(N). 67-65-ES (ES-32), June 1967.
- 127. Botanical and zoological expedition to the Angmagssalik district, East Greenland, 1966 (Preliminary Report), F. J. A. DANIELS, J. J. HOOFT, and J. G. deMOLENAAR, Contract NLABS (NATICK) No. 247.
- 128. Climatological conditions favoring occurrence of high temperatures at Yuma Proving Ground, Arizona, L. WILLIAMS. 67-42-ES (ES-28), January 1967 (AD 648016).
- 129. Environment of the NLABS Annex, D. W. HOGUE. 67-9-ES (ES-30), September 1966 (AD 655278).
- 130. Little America V Micrometeorology program, data and analysis, H. H. LETTAU, S. H. WOLLASTON, and P. C. DALRYMPLE. (Contribution No. 97, Institute of Polar Studies, Ohio State University). 67-46-ES (ES-29), January 1967 (AD 650188).
- 131. Rock glaciers and mass-wastage in the Galena Creek Area, Northern Absaroka Mountains, Wyoming, N. POTTER, JR., Contract No. DA19-129-AMC-967(N). March 1967.
- 132. Seasonal changes revealed by time-lapse photography, R. J. FRODIGH. 67-34-ES (ES-27). March 1967 (AD 652732).
- 133. Southern Hemisphere glacier atlas, J. H. MERCER, American Geographical Society, New York, Contract No. DA49-092-ARO-25. 67-76-ES (ES-33). June 1967.
- 134. Testing of NLABS cold-wet prototype uniform in Tierra del Fuego, E. J. MILLER, Contract No. DA19-129-AMC-834(N), July 1966.
- 135. World color regions atias, J. V. CHAMBERS. 67-31-ES (ES-21).
 March 1967 (AD 815834).*

Journal Acticles

- 130. ANSTEY, R. L. A comparison of alluvial fans in West Pakistan and the United States. Pakistan Geographical Review. 21(2):14-20 (July 1906).
- Geographical climatology. Tokyo J. Climatology 3(1):01 (December 1900).
- 138. BLACKFORD, P. A. Project TREND: Environmental research in Thailand. Army RND Newsmagazine, 8(3):2,24-35 (March 1967).
- 139. DALRYMPLE, P. C., and L. STROSCHEIN. Antarctic plateau, radiation climatology. U. S. Antarctic J., p.140 (September-Cctober 1400).
- 140. THOMPSON, W. F. Military significance of mountain environment studies. Army R&D Newsmagazine, 8(5):30-32 May 1907).

Technical Papers

- 141. AHMAD, N. East Pakistan urban centers and their recent growth.
 Third Annual Conference on Bengal Studies, University of
 Michigan, Ann Arbor, Mich., 11-13 May 1967.
- 142. ANSTEY, R. L. Military geography. 1634th Mobilization Designation Detachment, The Pentagon, Washington, D. C., 2 May 1967.
- 143. DODD, A. V., and A. GREENWALD. Local humidity variations in the U. S. Army Natick Laboratories area. Association of American Geographers, Toronto Canada, 28-31 August 1966.
- 144. ROBISON, W. C. Geographers in government. Annual Conference, Departments of Geography and Earth Science, Massachusetts State Colleges. Boston, Mass., 28 April 1967.
- 145. Some problems of geographical terminology. Institute of Australian Geographers, Sydney, Australia, 16 August 1966.
- 146. SHARON, D. Probability prediction of the persistence in weather elements. Massachusetts Institute of Technology, Cambridge. Mass., 10 May 1967.
- 147. STROSCHEIN, L. Project TREND. Army Meteorological R&D Coordination Committee, Hanover, N. H., 1-3 November 1966.
- 148. Micrometeorology and microclimatology of the Antarctic.

 U. S. Antarctic Research Programs, Skyland, Va., September 1966.
- 149. TRUEBLOOD, L. W. Applied research in military geography. Association of American Geographers, Toronto. Canada, 28-31 August 1966.
- The geography program at the U. S. Army Natick Laboratories. Oregon State University, Corvallis, Oregon. 23-24 February 1967.
- 151. WEXLER, R. L. The relationship between daily and annual rainfall in Thailand. Joint Technical Exchange Conference, Monterey. Calif., 6 April 1967.
- 152. WILLIAMS, L. Climatological aspects of high temperatures at Yuma Test Station, Arizona. Conference on Fair Weather Meteorology, American Meteorological Society, Santa Barbara, Calif., 28 February 2 March 1967.

Book Chapters

- 153. DALRYMFLE, P. C. A physical climatology of the Antarctic plateau.

 In Studies in Antarctic Meteorology, American Geophysical Union
 National Academy of Sciences--National Research Council.
 Publication 1482 (1966).
- 154. H. H. LETTAU, and S. H. W. LASTON. South Pole micrometeorology program: Data analysis. In Studies in Antarctic Meteorology, American Geophysical Union, National Academy of Sciences--National Research Council, Publication 1482 (1966).

Book Reviews

- 155. ROBISON, W. C. Geography of coastal deserts, by Peveril Meigs.
 The Profession: 1 Geographer, 18(6):400 (November 1960).
- Native inheritance, the story of corn in America, by
 Howard T. Walden, II. The Professional Geographer, 19(3) 102
 'May 1967).

Other Publications

- 157. ANSTEY, R. L. Application of quantified terrain data to vehicle design criteria. Proc. Army Science Conference, Washington, D. C., 1:23-36, August 1966.
- The physical environment of a typical tropical environment. Proc. Institute of Environmenta Sciences. 13th Annual Technical Meeting, Washington, D. C., 1:49-57, 1967.
- 159. FRODIGH, R. J. Military implications of seasonal environmental change as revealed through time-lapse photography. Proc. Army Science Conference, Washington, D. C., 1:263-277, August 1966.
- 160. ROBISON, W. C., and L. W. TRUEBLOOD. Contributions to "Arid-Lands Research Institutions - a World Directory," by P. PAYLORE, The University of Arizona Press, Tucson, Ariz., Contract No. DA49-092-ARO-71, 1967 (AD 655006).
- 161. WILLIAMS, L. Refuse disposal a metropolitan problem. Proc. Second International Meeting, Commission on Applied Geography. International Geographical Union, editor, A. A. Michel, The University of Rhode Island Press, Kingston, R. I., pp 79-83, April 1967.
- 162. An inventory of geographic research of the humid tropic environment, Vol. II, Compendium and Appendices. Texas Instruments, Inc., Contract No. DA49-092-ARO-33. 67-44-ES, December 1966.
- 163. Inventory of research on weather and climate of desert environments, C. H. REITAN and C. R. GREEN, Office of Arid Lands Research, The University of Arizona, Tucson, Ariz., Contract No. DA49-092-ARO-71, 1967.

Technical Reports

- 164. Amino carboxvlic inhibition of lipid oxidation in dehydrated foods, M. KAREL and S. R. TANNENBAUM, Massachusetts Institute of Technology, Contract No. DA19-120-AMC-254'N). 67-27-FD (FD-53), September 1966 (AD 640959).
- 165. Changes in TBA value of meat under controlled conditions

 M. E. BAILEY, V. C. WITTE, and G. F. KRAUSE, University of

 Missouri, Contract No. DA19-129-AMC-038(N). 67-67-FD (FD-55).

 April 1367 (AD 652911).
- 106. Development of dehydrated and bite-sized food items. H. HOLLENDER and M. V. KLICKA. Air Force Systems Command. AMRL-TR-65-100 December 1965.
- 167. Development of edible mouth coolants, R. W. SCROGES, IIT Research Institute, Contract No. DA19-129-AMC-46(N). 50-53-FD (FD-51). June 1966 (AD 638427).
- 168. Edible coatings for dried and compacted foods part II, M. S. COLE, Archer Daniels Midland Company. Contract No. DA19-129-AMC-102(N). 66-38-F9 (FD-48), May 1966 (AD 634252).
- 169. Hygroscopic equilibrium and texture of freeze-dried foods, J. G. KAPSALIS. 67-87-FL (FL-56). June 1967.
- 170. Incidence of Clostridium botulirum in raw meats, R. B. TOMPKIN, Swift & Company, Contract No. DA19-129 AMC-101(N), 66-44-FD (FD-50), June 1966 (AD 630221).
- 171. Isolation, nutrition, and metabolism of photosynthesizing plant tissues, A. C. HILDEBRANDT, University of 1 sconsin, DA19-129-QM-1817(N), 67-12-FD (FD-52), August 1966 (AD 637848).
- 172. Neutron and bremsstrahlung activation analysis, P. P. COOPER and G. L. BROWNELL, Massachusetts Institute of Technology, MITNE-82. May 1967.
- 173. Requirements for instant prepared, readv-to-eat, freeze-dried scrambled eggs. P. E. MONE and L. D. MINK. Swift & Company Contract No. DA19-129-AMC-121(N). 67-49.4D (FD-54), January 1967 (** 650637).
- 174. A study of the microbiology of selected gehydrated food products.

 F. E. WELLS, Midwest Research Institute, Contract No. DA19-129-AMC-206(N). 66-35-FD (FD-4)), May 1905 (AD #33390).

Journal Articles

- 175. ANELLIS, A., D. BERKOWITZ, C. JARBOE, and H. M. EL-BISI. Radiation sterilization of prototype military foods. II. Cured ham. Appl. Microbiol., 15:166-177 (1967).
- 176.

 , D. BERKOWITZ, C. JARBOE, and H. M. EL-BISI. Radiation sterilization of prototype military foods. III. Pork loin. Bacteriol. Proc., Ald (1967).
- 177. ANTI, A. W. Considerations different for space candies. Candy Industry and Confectioners' J., 127(14):54,56,59 (December 13, 1966).
- 178. BISHOV, S. J., and A. S. HENICK. A gas chromatographic method for continuous accelerated study of O₂ uptake in fats. J. Am. Oil Chem. Soc., 43:477 (1966).
- 7. MASUOK\, and A. S. HENICK. Fat quality and stability in dehydrated proteinaceous food mixes. Food Technol., 21:(3A)466(148A) (1967).
- 180. BROCKMANN, M. C. Compression of foods. Activities Report, 18:173-177 (Fall, 1966).
- 181. Seafood products for military use. Activities Report, 19(1):82-87 (Spring, 1967).
- 182. Storage stability of freeze-dried foods. Heating, Refrig. and Air Conditioning Eng. Assoc. J., p.54-58 (August 1966).
- 183. COOPER, R. D., and G. L. BROWNELL. A large coaxial Ge(Li) detector with plastic anticoincidence scintillator for activation analysis. Nucl. Inst. and Methods, 51:72-76 (1967).
- 194. DYMSZA, H. A., and G. S. STOEWSAND. High-energy diets from synthetic sources. Activities Report. 18(2):119-124 (Fall, 1966).
- 185. , G. S. STOEWSAND. P. DONOVAN, F. F. BARRETT, and P. A. LACHANCE. Development of nutrient-defined formula diets for space feeding. Food Technol., 20(10):100-112 (October 1966).

Journal Articles (continued)

- 186. GREENBERG, R. A., R. B. TOMPKIN, B. O. BLADEL, R. S. KITTAKA, and A. ANELLIS. Incidence of mesophilic Clostridium spores in raw pork, beef, and chicken in processing plants in the United States and Canada. Appl. Microbiol., 14:789-793 (1906).
- 187. HEILIGMAN, F., C. K. WADSWORTH, and C. E. PHILLIPS. Development of radiation-sterilized chicken. Food Technol., 21(5):109-110 (May 1907).
- 188. JOSEPHSON, E. S. Review of Army meat-sterilization radiation program. Isotopes and Radiation Technol. 3(4):353-356 (1)66.
- 189. MATTHERN, R. O. The potential of algae as food. Activities Report, 18(2):101-109 (Fall, 1906).
- 19). McGEACHIN, R. L., W. M. PAVORD, D. N. WIDMER, and P. A. PRELL. Comparative inhibition of mammalian amvlases by goat antisera to hog pancreatic amylase. Comp. Biochem. Physiol., 18 Tel-772 (1965).
- 191. MEHRLICH, F. P. For all the little pigs that never went to market. Columbia J. of World Business. 2(1) 57-01 (January-February 1907).
- 192. MEYER, R. A. Induced radioactivity in food and electron sterilization. Health Physics, 12:1027-1037 (1956).
- and J. L. BURKHARDT. Calculation of induced radioactivity in electron sterilized food. Health Physics, 12:1581-1587 (1906).
- 194. MULVEY, P. F., J. A. CARDARELLI, M. ZOUKIS, R. D. COOPER and B. A. BURROWS. Sensitivity of bremsstrahlung activation analysis for iodine determination. J. Nucl. Med., 7:603-011 (1906).
- 195. PORTER, W. L., A. S. HENICK, and M. CLIFFORD. The autoxidative contraction of monolayers of linoleic acid at a gas-water interface. J. Am. Oil Chem. Soc. 44:185 (1967).
- 196. PRATT, G. B., L. E. KNEELAND, F. HEILIGMAN, and J. J. KIILORAN.
 Irradiation induced gases in packaged foods. I. Identification
 and measurements. J. Food Sci.. 32(2):200-205 (1967).

Journal Articles (continued)

- 197. PREVITE, J. J. Salmonellosis, the problem and a potential remedy. Activities Report, 19(1):64-72 (1467).
- 198. , Y. CHANG, and H. M. EL-BISI. Detoxification of Salmonella typhimurium lipopolysaccharide by ionizing radiation. J. Bacteriol., 93(5) 1607-1614 (1967).
- 199. , Y. CHANG, and H. M. EL-BISI. Effect of radiation environment and recovery media on Salmonella typhimurium survival. Bacteriol. Proc., 3 (May 1967).
- 200. ROWLEY, D. B., and H. S. LEVINSON. Changes in spores of Bacillus megaterium treated with thioglycolate at a low pH and restoration of germinability and heat resistance by cations. J. Bacteriol., 93(3):1017-1022 (1967).
- 201. STOEWSAND, G. S., H. A. DYMSZA, S. M. SWIFT, M. A. MEHLMAN, and D. G. THERRIAULT Effect of feeding polyhydric alcohols on tissue lipids and the resistance of rats to extreme cold.

 J. Nutrition, 89(4):414-418 (August 1966).
- 202. STRASSER, J., and J. W. GIFFEE. The free siccation process. Activities Report, 19(1):12. Spring, 1967).
- 203. SWIFT, J. \$3 for hardware solves cont.o. olem. Food Eng., 38(10):79 (October 1966).
- 204. TOLLENAAR, D. Effects of mineral and vitamin supplementation on swimming times and other parameters related to performance of rats on a low calorie regimen. J. Nutrition. 90(4):441-448 (December 1966).
- 205. WALKER, J. E., and D. M. HOWELL. Dichlorobis (hydroxylamine) zinc. II. Inorgan. Syn., 4(2), (1967).

Technical Papers

206. ANELLIS, A. Annual research review on C. botulinum and 12-D concept. Interagency Botulinum Conference, Washington, D. C., June 1967.

- 207. ANELLIS, A. Radiation sterilization of prototype military foods.

 III. Pork loin. American Society for Microbiology. New York,
 N. Y., May 1967.
- 208. ANTI, A. W., and E. E. ANDERSON. Surface coatings for space foods.

 American Chemical Society, New York, N. Y., 11-10 September 1900.
- 209. BAKER, L. J. Radiation preservation of foods. Framingham State College, Framingham, Mass., o July 1907.
- 210. BRAZIL, T., A. @MINA, and D. E. WESTCOTT. Factors affecting the flavor, color and texture of flexibly-packaged thermally-processed bread. Institute of Food Technologists, Minneapolis, Minn., 10 May 1967.
- 211. BROCKMANN, M. C. The development and use of military food specifications. Egg Processors Conference, Iowa State University. Ames, Iowa, 5 January 1967.
- 212. Military food research. U. S. Army Quartermaster School. Fort Lee, Va., 30 November 1960 and 2-3 May 1907.
- 213. Military development of new poultry products. Conference on Advances in Poultry and Egg Processing. Research Council, Institute of American Poultry Industries Columbus, Ohio, 16 June 1967
- 214. BRYNJOLFSSON, A. Cost of irradiation. New York Academy of Sciences, New York, N. Y., 12 April 1957.
- 215. Machine irradiation sources and irradiation technology.

 American Institute of Chemical Engineers, Atlantic City, N. J.
 21 September 1905.
- 216. and T. G. MARTIN, III. Radiation protection problems associated with electron accelerators. AMC Radiation Protection Symposium, Edgewood Arsenal, Md., 26 May 1967.
- 217. BUCK, P. A. Looking at the earth as the greatest spacecraft.
 Institute of Food Technologists, Stamford, Conn. 6 December
 1966; Food Update Seminar, San Francisco, Calif., 3 March 1967;
 Canadian Institute of Food Technologists, Montreal, Canada,
 25 May 1967.

- 218. CHANDLER, H. K. Current status of food irradiation program.

 Association of Food and Drug Officials of the Southern States.

 Roanoke, Va., 4 April 1967; Association of Food and Drug

 Officials of the Central Atlantic States, Baltimore, Md.,

 24 May 1967.
- 219. COOPER, R. D. Neutron and bremsstrahlung activation analysis with a Ge(Li) spectrometer. Massachusetts Institute of Technology, Cambridge, Mass., 13 March 1967.
- , D. M. LINEKIN, and G. L. BROWNELL. Activation analysis of biological tissue without chemical separation. International Atomic Energy Agency Symposium on Nuclear 'ctivation Techniques in the Life Sciences. Amsterdam. Netherlands, 8-12 May 1967.
- , D. M. LINEKIN, and G. L. BROWNELL. Measurement of trace elements in tissue by means of a Ge(L1) detector with Compton suppression. American Nuclear Society, San Diego, Calif. June 1967.
- 222. Crowley, N. H. Comparisons of energy expenditure with selected biochemical findings in healthy college women. American Dietetic Association, Boston, Mass., 26 October 1966.
- 223. DYMSZA, H. A. Interrelationship between diet and intestinal microflora in gnotobjotes, VIIth International Congress of Nutrition, Hamburg, Germany, 3-10 August 1966.
- 224. G. S. STOEWSAND, and S. A. MILLER. Metabolizable energy content of unconventional food esters. Federation of American Societies for Experimental Biology, Chicago, Ill., 17-21 April 1967.
- 225. EL-BISI, H. M. Food-borne microbial pathogenesis. School of Public Health and Administrative Medicine, Institute of Nutrition Sciences, Columbia University, New York, N. Y., March 1967.
- 226. Mechanism and kinetics of resistance of bacterial endospores to heat and radiation, Unilever Research Laboratories, Bedford, England, 8 July 1966.

- 227. EL-BISI, H. M. Microbiological aspects of irradiated food.

 Danish Atomic Energy Commission, Riso, Denmark, 11 July 1966.
- 228. Microbiological safety and stability of military procurements ~ research and development aspects at NLABS. Central Institute for Nutrition and Food Research, /cist, Netherlands, July 1966.
- 220. NLABS R&D program in microbiology of food and food processes. Swedish Institute for Food Preservation Research, Goteborg, Sweden, July 1966.
- 230. What is new in food microbiology. Northeastern, Leo-Rettger and New York Chapters. American Society for Microbiology, Hartford, Conn., November 1966.
- 231. Salmoneliosis control in military procurement. Conference on Destruction of Salmonellae, Albany, Califa, 1966.
- 232. Summary and conclusions. Food Microbiology Symposium Northeastern Chapter, Institute of Food Technologists, Cambridge, Mass., February 1907.
- 233. GIDDINGS, G. G., and E. WIERBICKI. Development of radiationsterilized shrimp. Institute of Food Technologists, Minneapolis, Minn., 17 May 1967.
- 234. HEILIGMAN, F., and G. G. GIDDINGS. Irradiation-sterilization of sea food items. Atlantic Fisheries Technological Conference. Point Pleasant, N. J., 20 September 1966.
- 235. HOLLENDER. H. A., M. V. KLICKA, and P. A. LACHANCE. Space feeding ~ meeting the challenge. American Association of Cereal Chemists. Los Angeles, Calif., 2-o April 1967.
- 236. JOSEPHSON, E. S. The Army program. Nuclear Application Opportunities Briefing on Raduation Preservation of Foods. Southern Interstate Nuclear Board and U. S. Atomic Energy Commission, Oak Ridge Tenn., 2 February 1967.
- 237. Preservation of foods by ionizing radiation. Canadian Institute of Food Technology, Montreal. Canada. 25 May 1967.

- 238. JOSEPHSON, E. S. Radiation preservation of foods. Military Science Professional Lecture Series, University of Rhode Island, Kingston, R. I., 19 April 1967.
- 239. Radiation preservation of foods. A report on progress, status, outstanding problems and plans for commercialization.
 Ontario Research Foundation, Toronto, Canada, 17 November 1966.
- 240. Status of the U. S. Army program in food irradiation.

 American Institute of Chemical Engineers, Atlantic City, N. J.,
 21 September 1966.
- 241. The present general outlook for radiation processing.

 Dairy and Food Industries Supply Association Food Forum,
 Atlantic City, N. J., 25 October 1966.
- 242. , A. BRYNJOLFSSON, and E. WIERBICKI. Engineering and economics of food radiation. New York Academy of Sciences, Division of Engineering, New York, N. Y., 12 April 1967.
- 243. KATSALIS, J. G., and B. DRAKE. Hygroscopic equilibrium and textural parameters of special freeze-dried foods. Institute of Food Technologists, Minneapolis, Minn., 14-19 May 1967.
- , M. WOLF, M. DRIVER, and J. WALKER. The effect of moisture content on flavor and texture stability of dehydrated foods. American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Minneapolis, Minn., 26-27 June 1967.
- 245. KAUFFMAN, F. L., J. W. HARLAN, and E. WIERBICKI. Changes in irradiation flavor intensity of beef steaks during storage at room temperature. American Chemical Society, New York, N. Y., 11-16 September 1966.
- J. W. HARLAN, and E. WIERBICKI. Investigation of the nature of the chemical and physical changes in beef steaks as influenced by irradiation temperature, dose, and storage time. American Chemical Society, Miami Beach, Fla., 10-14 April 1967.
- 247. KENYON, E. M. Microwave food preparation for the Army in the field. U. S. Army Reserve R&D Group 1209 (Training).

 Massachusetts Institute of Technology, Cambridge, Mass.,
 15 September 1966.

- 248. KENYON, E. M. Rations for defense requirements. U. S. Air Force Reserve Squadron 9230, Cambridge, Mass., 11 October 1966.
- 249. KILLORAN, J. J., and E. WIERBICKI. Electron versus gamma radiation sterilization of beef and ham in flexible packages.

 Institute of Food Technologists, Minneapolis, Minn., 16 May 1967.
- 250. KILMORE, M. A., W. BATCHELDER, L. SANTORO, and S. M. SWIFT.

 Cecum size of the axenic rat as influenced by diet. Association of Gnotobiotics, Madison, Wis., 11-13 June 1967.
- J. McCORMICK, R. L. FLENTGE, and W. K. CALHOIN.

 Gastrointestinal blood flow as influenced by changes in dietary fat level. Federation of American Societies for Experimental Biology, Chicago, III., 17-21 April 1907.
- J. McCORMICK, and L. M. BRESLOUF. Relationship of dietary intake to water requirements for exhaustive running in rats. American Physiological Society, Houston, Texas. 29 August 2 September 1966.
- 253. KLICKA, M. V. Army field rations. Walter Reed Army Institute of Research, Walter Reed Army Medical Center, Washington D. C., 21 March 1967.
- 254. Combat feeding systems, U. S. Army Quartermaster School. Fort Lee, Va., 2-3 May 1967.
- 255. Foods of the future. Welleslev Hills Women's Club, Wellesley Hills, Mass., 13 October 1066.
- 256. Foods for space travel. New York Home Economics
 Association, Western District, Buffalo, N. Y.. 2 November 1960.
- Operational rations, current and future. U. S. Army Transportation School, Fort Eustis, Va., 23 March 1967.
- Space foods. Men's Brotherhood, Congregational Church,
 Lexington, Mass., 7 December 1960; Marlboro High School, Marlboro,
 Mass., 14 April 1967; St. Anselm's College, Manchester, N. H.,
 17 May 1967.

- 259. KLICKA, M. V. Space nutrition. Department of Foods and Nutrition, Syracuse University, Syracuse, N. Y., 19 June 1967.
- , H. A. HOLLENDER, and P. A. LACHANCE. Foods for astronauts. Central New York Home Economists, Syracuse, N. Y... 19 October 1966; American Dietetic Association Meeting, Boston Mass., 27 October 1963; Cardozo Lodge, Knights of Pythias, Framingham, Mass., 6 February 1967; Milne School, Albany, N. Y., 4 May 1967; Tastern District Home Economics Association, Albany, N. Y., 4 May 1967.
- 261. KOHN, R. The application of ionizing radiation in technique and nature sciences. Northeastern University, Boston. Mass., 27 January 1967.
- 262. LACHANCE, P. A., M. V. KLICKA, and H. A. HULLENDER. Cereal food products utilized in the U. S. manned space program. American Association of Cereal Chemists, Los Angeles, Calif., 2-6 April 1967.
- 263. LEE, F. H. New utilization of food processing and at home in space. Jr. High School Assembly, Reading, Mass., 12 May 1967; Trade School Assembly, Worcester, Mass., 18 May 1967; Framingham North High School, Framingham, Mass., 2 June 1967.
- 264. Understanding the B-ration. Semina: for Dietitians of the Armed Services, U. S. Army Natick Laboratories, Natick, Mass.. 24 October 1966.
- 265. MARTIN, T. G., III, Radiation protection in radioisotope laboratories. Suffolk University, Boston, Mass., 22 March 1967.
- 266. MATTHERN, R. O. Potential use of extraterrestrial resources in life support systems. Fifth Annual Meeting, Working Group on Extraterrestrial Resources, George C. Marshall Space Center. Huntsville, Ala., March 1967.
- 267. MEHRLICH, F. P. Agricultural experiences throughout the world.
 Massachusetts Fiower Growers' Association, Boston, Mass.,
 23 October 1966.
- 268. Army combat ration. Walter Reed Army Institute of Research, Washington, D. C., 4 August 1966.

- 269. MEHRLICH, F. P. Biscuits in the sky. The New England Bakers Association, Boston, Mass., 5 December 1966.
- Current status of garrison and combat feeding in the U.S. Army. Third Far Eastern Symposium on Nutrition, Manila. P. I 18 February 1967.
- 271. Foods in the space age. American School Food Service Association, Pittsburg, Pa., 16-20 October 1966.
- 272. Introduction of new and improved subsistence items into the military supply system. Research and Development Associates. Richmond, Va., 11 April 1967.
- 273. New processes in dehydration, American Dietetic Association, Boston, Mass., 26 October 1966.
- 274. The wholesomeness of military foods. Si th U.S. Army Veterinary Civil California Association of Sania rians, Los Angeles, Calif., 13 April 1967; Defense Training Seminar. Sixth Army Presidio, San Francisco Calif., 9 February 1967.
- 275. O'CONNOR, E. Food Division of the U. S. Army Natick Laboratories Regis College, Weston, Mass., 30 November 1906.
- 276. PHILLIPS, C. E. Acceptance of irradiated foods. American Dietetic Association, Boston, Mass., 26 October 1966.
- 277. PRELL, P. A. Food frontiers. Daughters of the American Revolution. Wayland, Mass., 4 March 1967, Happy Hollow School, Wavland, Mass., 11 May 1967.
- 278. PREVITE, J. J. The laborator notebook. Honor Student Lecture of Thayer Academy Students, U. S. Army Natick Laboratories. Natick, Mass., 14 July 1966.
- 279. Mutagenic effects of low dose irradiation in salmonellae.

 Food Laboratory Seminar, U. S. Army Natick Laboratories, Natick
 Mass., 23 February 1967.
- 280. On the nature of botulism. Food Laboratory Seminar,
 U. S. Army Natick Laboratories, Natick, Mass., 11 January 1907.

- 281. PREVITE, J. J., Y. CHANG, and H. M. EL-BISI. Radiation induced mutation and alteration in virulence and antigenicity and/or antibiotic resistence of S. typhimurium. Project Meeting on Radiation Pasteurization of Fresh Poultry, Oak Ridge, Tenn., 3 February 1967.
- 282. RAHMAN, A. R., E. E. ANDERSON, K. R. JOHNSON, and D. S. CRIZ. The effect of various sweetening agents on the quality of canned jellied cranberry sauce. Institute of Food Technologists, Minneapolis, Minn., 15 May 1967.
- 283. RAUCH, A. C. U. S. Armed Forces subsistence specifications. New England Food Processors Association, Inc., Waltham, Mass., 22 June 1967.
- 284. SuHMIDT, T. R. Dehydrated foods and space focus. Mattapan-Milton Lion's Club, Milton, Mass., 6 October 1966.
- 285. Freeze-dried foods. Wellesley Hills Junior women's Club, Wellesley, Mass., 3 October 1966.
- 286. Space feeding. Special Orientation Program, Research and Development Group, Boston, Mass., 15 September 1966.
- 287. Space foods. Christ the King Lutheran Curch. Holliston.

 Mass., 13 November 1966.
- 288. SHULTS, G. W., and E. WIERBICKI. Development of new irradiated meat items: corned beef and hamburger. Research and Development Associates, Richmond, Va., 11 April 1967.
- 289. and E. WIERBICKI. Time-temperature relationship for enzyme-inactivation in irradiated beef steaks. Institute of Food Technologists, Minneapolis, Minn., 15 May 1967.
- 290. STOEWSAND, G. S. Synthetic sources of calories in the diets of rats and dogs. VIIth International Congress of Nutrition, Hamburg, Germany, 3-10 ugust 1966.
- 291. STW*SSER, J. The freeze-desiccation process. Institute of Food Toologists, Minneapolis, Minn., 14-19 May 1967.
- 292. TUOMY, J. M. Food for space travel. Metropolitan Dairy Technology Society, New York, N. Y., 11 October 1966.

- 293. TEOMY, J. M., L. HINNERGARDT, and R. L. HELMER. Effect of head-space oxygen on the quality of freeze-dried beef and chicken stews. Institute of Food Technologists, Minneapolis, Minn., 14-19 May 1967.
- 294. UMINA, A. P. Research and development in cereal and bakerv products for military feeding. U. S. Army Quartermaster School, Subsistence Officers* Class Fort Lee, Va., March 1:07.
- 295. WESTCOTT, D. E. Research and development in cereal and bakery products for military feeding. U. S. Army Quartermaster School, Subsistence Officers' Class, Fort Lee, Va., 28 September 1966.
- 296. Supporting life in space. Newburgh Free Academy.

 Newburgh, N. Y., 21 November 1960.
- 297. What the military expects of industry. American Association of Cereal Chemists, New York N. Y. 1 November 1966.
- 298. VHITE, V. M. Foods for the future. State of Maine Private School Lunch Workshop, Waterville, Me., 16 August 1966; Massachusetts School Lunch Workshop, Boston, Mass., 19 April 1967; Michigan School Food Service Association Mt. Pleasant, Mich., 28 June 1967.
- 299. How to teach basic nutrition in this changing world.

 American School Food Service Convention, Pittsburgh, Pa..

 18-19 October 1966.
- 300. How to teach nutrition in the space age. State of Maine Private School Lunch Workshop, Waterville, Me., 17 August 1966.
- 301. New developments in foods. New Jersey School Food Service Association Spring Convention, Cherry Hill, N. J., 14 April 1967.
- 302. WHITEHAIR, L. A., and D. E. HILMAS. Radiological problems in the national food irradiation program. Conference on Importance and Safety of Foods, Mayaguez, Puerto Rice, 20-28 April 1967.
- 303. WIERBICKI, E. Bacon in the atomic age. Meat Science Institute.
 Rutgers University, New Brunswick, N. J., 22 August 1900.

FOOD LABORATORY

Technical Papers (continued)

- 304. WIERBICKI, E. High-dose radiation processing of meat, poultry, and sea food items. Nuclear Application Opportunities Briefing on Radiation Preservation of Foods, Southern Interstate Nuclear Board and U. S. Atomic Energy Commission, Oak Ridge, Tenn.. 2 February 1967.
- 305. , C. K. WADSWORTH, and E. S. JOSEPHSON. Industrial production tests of irradiated food for the Armed Forces. Research and Development Associates, Richmond, Va., 11 April 1967.

Book Chapters

- 306. HARLAN, J. W., F. L. KAUFFMAN, and F. HEILIGMAN. Effect of irradiation temperature and processing conditions on organoleptic properties of beef and chemical yields in model systems. In Radiation Preservation of Foods, American Chemical Society, wington, D. C. (1967).
- 307. JARRE.T, R. D., SR. Radiation dosimetry in relation to high intensity radiation sources. <u>In Radiation Preservation of Foods</u>, American Chemical Society, Washington, D. C. (1967).
- U. S. Army radiation laboratory. In Radiation Preservation of Foods, American Chemical Society, Washington, D. C. (1967).
- 309. JOSEPHSON, E. S. Simplified precedures for obtaining clearance of foods preserved by ionizing energy. <u>In Food Irradiation</u>, International Atomic Energy Agency, Vienna (1966).
- and J. H. FRANKFURT, Preface. In Radiation Preservation of Foods, American Chemical Society, Washington, D. C. (1967).
- 311. MANDELS, M., and E. T. REESE. B-glucanases other than cellulase, methods in enzymology. In Complex Carbohydrates, Vol. 8, Academic Press, New York (1966).
- 312. SINNHUBER, R. O., M. K. LANDERS, T. C. YU, M. SIMON, and F. HEILIGMAN. Development of radiation-sterilized sea food products. I. Enzyme-inactivated cod and halibut patties. In Food Irradiation, International Atomic Energy Agency, Vienna (1966).

FOOD LABORATORY

Other Publications

- 313. EL-BISI, H. M., O. P. SNYDER, and R. E. LEVIN. Radiation death kinetics of Cl. botulinum spores at cryogenic temperatures.

 Botulism 1900. In Proc. of the Fifth International Symposium on Food Microbiology, Chapman and Hall, London, England (1907).
- 314. R. M. VONDEL, and P. WASSARMAN. Significant process parameters for microbial death in the vapor phase. In Abstracts of Papers, Organizing Committee of the Congress, IX International Congress for Microbiology, Moscow, USSR (1906).
- 315. JOSEPHSON, E. S. Discussion and summary. In Radiation Preservation of Foods, U. S. Atomic Energy Commission, Division of Technical Information, Oak Ridge, Tenn. (1960).
- 316. Statement. In Hearings before the Subcommittee on Research, Development, and Radiation of the Joint Committee on Atomic Energy, Congress of the United States, Superintendent of Documents, Washington, D. C. (1966).
- The present general outlook for radiation processing.

 Proc. of the Technology of the Food Supply: Management Looks at Current Resources, Dairy and Food Industries Supply Association, Inc., Washington, D. C. (February 1967).
- 318. and K. G. SHEA. Food preservation. Proc. of the American Nuclear Society, National Topical Meeting, 1:IV-3-IV-25 (May 1966).
- 319. MEHRLICH, F. P. Army rations. In Encyclopedia on Food and Food Science, John Wiley & Sons, Inc., New York, N. Y. (1967).
- 320. WIERBICKI, E. Summary of acceptance data on irradiated ham.

 Minutes of Meeting, National Academy of Science-National Research Council, 9 March 1907.

Technical Reports

- 321. Biaxial tensile tester for fabrics, R. E. SEBRING and W. D. FREESTON, JR., Fabric Research Laboratories, Inc., Contract No. DA19-129-AMC-1042(N). 67-71-GP, May 1967.
- 322. Design manual for ground mounted air-supported structures (single and double wall), A. E. DIETZ, R. B. PROFFITT, and R. S. CHABOT, Hayes International Corp., Contract No. DA19-129-AMC-129(N). 67-35-ME, October 1966 (AD 648645).
- 323. Determination of container design criteria, M. GERTEL and D. FRANKLIN, Mitron Research and Development Corp., Contract "U. 2019-129-QM-2082. 67-50-GP, January 1967 (AD 817510).
- 324. Development of paper cutter, high-capacity, high-speed, light-weight, J. F. WHEELER. 67-69-GP, May 1967 (AD 816391).*
- 325. Development of the 15,000-1b capacity electric missile handling vehicle, N. H. FERTMAN. 67-1 -ME (MHE-15), September 1966 (AD 802514).*
- 326. Evaluation of Army uniform buttons, heavy-duty shank, P. J. CONNOLLY. 67-32-ME, September 1966 (AD 803373).*
- 327. Evaluation of lightweight, insulated cargo containers, F. W. FRANKE. 67-06-GP, March 1967 (AD 815553).*
- 328. Evaluation of light eight, urethane foam insulated, prefzbricated refrigerators, E. B. THOMAS. 67-73-GP, May 1967 (AD 817589).*
- 329. Evaluation of 12- and 36-pan dough proofing cabinet. J. K. PRIFTI. 67-56-GP, January 1967 (AD 815295).*
- 330. Evaluation studies of gasoline lanterns. A. G. MILLER. 67-75-GP, May 1967 (AD 816539).*
- 331. Evaluation of truck, experimental, forklift, 2,000, 4,000, and 6,000-1b capacity, transistorized, electric-powered, S. B. VINDSBERG. 67-30-ME (MHE-16), September 1966 (AD 808770).*
- 332. Evaluation of truck, forklift, electric, 4,000-1b capacity, 72-volt, battery-operated, S. B. VINDSBERG. 67-18-ME (MF -14), September 1966 (AD 802366).*

Technical Reports (continued)

- 333. Evaluation of wax impregnated corrugated fiberboard containers, A. MILLER. 67-4-CD, July 1956 (AD 637113).
- 334. Guide for estimating maximum anchor loads on air-supported structures, T. C. STRAIN and R. F. TUMEINSKI. 67-54-GP, March 1907 (AD 6.5279).
- 335. Heating media for processing foods in flexible packages Phase II. Final, I. J. PFLUG and C. BORRERO, Michigan State University Contract No. DA19-129-AMC-145(N). 67-47-GP, May 1967 (AD 653596).
- 336. Migration of flexible packaging components into foods, R. L. FFRM. The Pillsbury Company, Contract No. DA19-129-AMC-384(N). 66-56-CD, June 1906.
- 337. Product improvement of food container, insulated, H. W. THIBODEAU. 67-70-GP, May 1907.
- 338. Resistance of flexible packaging materials to penetration by microbial agents, R. A. LAMPI, FMC Corporation. Contract No. DA19-12:- AMC-662(N). 67-63-GP, April 1967 (AD 651493).
- 339. Storage stability o. Civil Defense shelter rations, J. G. WOODROOF and S. R. CECIL, University of Georgia, Georgia Experiment Station, Contract No. DA19-129-QM-2050(N). 67-25-CD, October 1966 (AD 640823).
- 340. Study of connercial gasoline engines for heater, duct-type, portable, gasoline, 250,000 BTU, C. J. McKEOWN. 67-78-GP, June 1967 (AD 817590).*
- 341. Tent, pop-up. 5-man (tropical climate), D. B. SHAW. 67-61-GP March 1967 (AD 812948).*
- 342. Value engineering study of stove, gasoline, two-burner, J. C. PERRY, J. K. PRIFTI, and A. G. MILLER. 67-88-GP, June 1967.*
- 343. Wind tunnel tests and analyses for ground-mounted, air-supported structures, A. E. DIETZ, R. B. PROFFITT, and R. S. CHABOT. 67-36-ME, October 1966 (AD 651954).

Journal Articles

- 344. KILLORAN, J. J. Packaging of irradiated foods. Modern Packaging, 40(8):179-183 '196 ...
- Some frontiers in packaging. Food Technol., 20(8):52-59
- 340. F. HEILIGMAN, G. B. PRATT, and L. E. KNEELAND. Irradiation-induced gases in packaged foods. 1. Identification and measurements. J. Food Sci., 32(2):200-205 (March-April 1967).
- 347. LAMPI, R. A. Microbial recontamination in flexible films. Activities Report, 19(1):51-58 (Spring, 1967).
- 348. NEBESKY, E. A., and M. S. PETERSON. A new plan and goal for packaging research. Army R&D Newsmagazine, 8(3):34 (March 1967).
- 349. and M. S. PETERSON. Packaging for foods in 1986. Activities Report, 18(2).156-162 (Fall, 1966).
- and M. S. PETERSON. Packaging research: A challenge to industry. Package Eng., 11(12):84 (December 1966).

Technical Papers

- 351. HU, K. H. Flexible package material characteristics related to moisture and gas transmission. Military-Industry Conference, Research and Development Associates, Natick, Mass., 18-19 October 1966, and New England Chapter, The Packaging Institute, Newton, Mass., 1 February 1967.
- Gas and water vapor transmission into foil laminated pouches. Institute of Food Technologists, Minneapolis, Minn., 14-19 May 1967.
- 353. KILLORAN, J. J. Irradiated foods. Holy Name Society, Our Lady of Angels Church, Worcester, Mass., 8 January 1967, and College of the Holy Cross, Worcester, Mass., 18 January 1967.
- and D. MAUNDER. A biotest method for detection of loss of integrity of abused flexible packages of processed shelf-stable foods. Institute of Food Technologists, Minneapolis, Minn., 14-19 May 1967.

Technical Papers (continued)

- 355. KILLORAN, J. J. and E. WIERBICKI. Electron versus gamma radiation sterilization of beef and ham in flexible packages. Institute of Food Technologists, Minneapolis, Minn., 14-1: May 1957.
- 350. NEBESKY, E. A. Forecast in packaging. Annual National Forum The Packaging Institute, New York, N. V., 4 October 1906.
- 357. Future developments in packaging. Philadelphia Chapter.
 Society of Packaging and Handling Engineer: Thiladelphia, Fa.,
 20 September 1900, and Connecticut Chapter. Society of Packaging and Handling Engineers, Meridan. Conn., 9 February 1907.
- 358. Professionalism in the food industry. Food Update Seminar, San Francisco, Calif., 6 March 1907.
- 359. VENETOS, M. A. Development of velocity shock recorder for measurement of shipping environments. Symposium on Shock and Vibration. Los Angeles, Calif., 18-20 October 1965.

Other Publications

- 360, NEBESKY, E. A., and M. S. PETERSON. Forecast in packaging. Proc. 28th Annual National Forum, The Packaging Institute, New York, N. Y., 2:104, 3-5 October 1966.
- 361. VENETOS, M. A. Development of velocity shock recorder for measurement of shipping environments. Shock and Vibration Bulletin. No. 36, Naval Research Laboratory, Washington, D. C., February 1967.

Technical Reports

- 362. Analysis of U. S. Army food preference survey (1963), J. M. KAMEN, D. R. PERYAM, D. B. PERYAM, and B. J. KROLL, Peryam & Kroll Research Corporation, Contract No. DA19-129-AMC-719(N), 67-15-PR, May 1967 (AD 652910).
- 363. Attitudes of troops in the tropics, R. J. LEE. 67-57-PR (EPT-6), February 1967 (AD 649540).
- 354. Chemical and biological analysis of tan-o-quil-QM-treated water-fowl feathers, H. MARKARIAN and J. J. PRATT, JR. 67-85-PR (AE-8), May 1967 (AD 655283).
- 365. Human factors requirements for the design of helicopter aircrewmen's seat and groin protective units, R. L. BURSE. 67-28-PR (EPR-11), September 1966 (AD 640891).
- 360. Microbial ecology in a hydrocarbon fuel-water-metal environment, M. H. KUO. Stanford Research Institute. Contract No. DA19-129-AMC-216(N). Final. 67-68-PR, 31 January 1967 (AD 813185).*
- 367. Proceedings of the fifteenth conference on prevention of microbiological deterioration of military material, A. M. KAPLAN. 67-80-PR, June 1967 (AD 816380).*
- 368. Thermal conductivity of vitreous silica: selected values, L. C. K. CARWILE and H. J. HOGE. 67-7-PR (TC-4), July 1966 (AD 636276).

Journal Articles

- 369. ALTENAU, A. C., and C. MERRITT, JR. Selected copper-amine complexes as stationary phases. J. Gas Chromatography, 5(1):30 (January 1967).
- 370. ANGELINI, P., D. A. FORSS, M. L. BAZINET, and C. MERRITT, JR. Methods of isolation and identification of volatile compounds in lipids. J. Am. Oil Chem. Soc., 44(1):20 (January 1967).
- 371. BLATT, W. F., S. M. ROBINSON, F. M. ROBBINS, and C. A. SARAVIS.
 An ultrafiltration membrane for the resolution and purification of bovine alpha lactalbumin. Anal. Blochem., 18:81 (January 1967).

- 372. BRANNON, D. R., F. W. PARRISH, B. J. WILEY, and L. LONG, JR. Microbial transformation of a series of androgens with Aspergillus tamarii. J. Org. Chem., 32(5):1521 (May 1907).
- 373. CAREY, F. A., D. H. BALL, and L. LONG, JR. 1.2·3.5-D₄-O-1so-propylidene-a-p-apio-L-furanose, Carbohydrate Res., 3(2) 205 (December 1966).
- 374. CHEN, F. C., and E. T. REESE. Proanthocyanidin from persimmon fruits. J. Chinese Chem. Soc., 14(1):41 (March 1967).
- 375. CLAPP, R. C., R. A. COBURN, F. H. BISSETT, and L. LONG, JR. Cyanogenesis in manioc. Linamarin and isolinamarin. Phytochem. 5:1323 (November 1966).
- 376. COBURN, R. A., and L. LONG, JR. Gynocardin. J. Org. Chem., 31:4312 (December 1966).
- 377. DATEO, G. P., and L. M. ROTH. D-Gluconic Acid: Isolation from the defensive secretion of the cockroach <u>Eurycotis decipiens</u>. Science, 155:88 (6 January 1967).
- 378. EVANS, M. E., and F. W. PARRISH. Methyl 2.3:4.6-Di-O-isopropy-lidene-q-D-glucopyranoside. Tetrahedron Letters, 32:3305 (1966).
- 379. , F. W. PARRISH, and L. LONG, JR. Acetal exchange reactions. Carbohydrate Res., 3(4):453 (February 1967).
- 380. FLORENTINE, G. J. An abdominal receptor of the American cock-roach, Periplaneta americana (L.) and its response to airborne sound. J. Insect Physiol., 13(2):215 (February 1967).
- 381. FORSS, D. A., P. ANGELINI, M. L. BAZINET, and C. MERRITT, JR. Volatile compounds produced by copper-catalyzed oxidation of butterfat. J. Am. Oil Chem. Soc., 44(2):141 (February 1967).
- 382. GURNEY, A. B., and L. M. ROTH. Two new genera of South American cockroaches superficially resembling loboptera, with notes on bionomics (Dictyoptera, Blattaria, Blattelidae). Psyche. 73(3):196 (September 1966).

- 383. HAGEN, P., E. T. REESE, and O. H. STAMM. Enzymatische hydrolyse reaktiv gerarbter cellulose. Helv. Chim. Acta, 49(7):2278 (31 October 1960).
- 384. HARTMAN, H. B., and L. M. ROTH. Stridulation by a cockroach during courtship behaviour. Nature, 213(5082):1243 (25 March 1967).
- and L. M. ROTH. Stridulation by the cockroach Nauphoeta cinerea (Olivier) during courtship behaviour. J. Insect Physiol., 13:579 (April 1967).
- 386. HAYON, E. M. The electron in solution. Science, 2(8):67 (August 1966).
- and J. J. McGARVEY. Flash photolysis in the vacuum ultraviolet region of SO₄²⁻, CO₃²⁻, and OH⁻ ions in aqueous solutions. J. Phys. Chem., 71(5):1472 (April 1967).
- 388. HEINMETS, F. Cellular growth, injury and death: Mathematical formulation and analog computer analysis. Helgelander wiss. Meeresunters., 185:168 (1966).
- 389. HOGE, H. J., and R. A. SEGARS. Reply by authors to W. C. Rolison and J. R. Nelson. Amer. Inst. Aeronautics and Astrorautics J., 4(7):1310 (July 1066).
- and R. A. SEGARS. An equation for the entrainment of ejectors. Amer. Inst. Aeronautics J., 4(8):1689 (September 1966).
- 391. HYATT, M. T., P. K. HOLMES, and H. S. LEVINSON. Activation of Bacillus megaterium spore germination by water in the vapor phase. Biochem. et Biophys. Res. Comm., 24(5):701 (8 September 1966).
- 392. KRONMAN, M. J. Fluorescence studies of the molecular conformation of a pha lactalbumin. Biochem. et Biophys. Acta, 133.19 (18 January 1967).
- 393.

 1. G. HOLMES, and F. M. ROBBINS. Inter- and intramolecular interactions of alpha lactalbumin. VIII. The alkaline conformational change. Biochem. et Biophys. Acta, 133:46
 (18 January 1967).

- 394. LEVINSON, H. S., and E. GARBER. Release of inorganic phoshate from irradiate! yeast Radiation biodesimetry and evaluation of radioprotective compounds. Amii Migrobiol. 1503) 431 (March 1907).
- 395. LOCKHART, J. M. Ambient temperature and time stimation. J. Exper Psychol., 73(2):286 (February 1907).
- 396. MANDELS, G. R., and R. .IIOLS. Constitutive and induced trehalose transport mechanisms in spores of the fungus Myrothecium verrucaria. J. Bacta 33 1:159 (January 1967).
- 397. MARKARIAN, H., J. J. PRATT, JR., F. KANE, and B. H. KANTACK.
 Insecticide residue in foods subjected to a roso's inder simulated warehouse conditions. J. Econ. Entomology, 7 (4) 844 (August 1900).
- 398. McGRATH, W., and J. J. McGARVEY. The production deactivation and chemical reactions of $O(\sqrt[1]{D})$ atoms. Planetary Space Sci., 15-427 (1907).
- 799. MERRITT, C., JR., P. A. FORSS, P. ANGELINI, and M. L. BAZINET Volatile compounds produced by irradiation of butterfat. J. Am. Oil Chom. Soc. 44(2):144 February 1967).
- and D. H. ROBERTSON. The analysis of proteins, peptines and amino acids by pyrolysis gas chromatography and mass spectrometry. J. Gas Chromatography, 5.2% (Fibruary 1967).
- 401. PARRISH, F. W., and F. T. REESE. Amoretic form of D-glucose produced during enzymolysis. Carbohydrate Res., 3/4):424 February 1907).
- 402. REESE, E. T., and F. W. PARRISH. A comparison of synthetic dextran with a natural product by enzymic methods. Biopolymers, 4(4) 1043 (October-November 1966).
- 403. ROBBINS, F. M., R. L. ANDREOTTI, L. G. HOLMES, and M. J. KRONMAN. Inter-and intram lecular interactions of alpha lactalbumin. VII. The hydrogen ion titration curve of alpha lactalbumin. Biochem. et Biophys. Acta, 133-33 18 January 1967).
- 404. ROBERTSON, D. H., and C. MERRITT, JR. Tandem operation features pyrolysis gas chromatography with mass spectrometry. Laboratory Management, 4(7):32 (July 1966).

- 405. ROTH, L. M. The evolutionary significance of rotation of the ootheca in the Blattaria, Psyche, 74(2):85 (June 1967).
- and R. H. BARTH, JR. The sense organs employed by cockroaches in mating behaviour. Behaviour, 28(1-2):58 (1967).
- 407. ROTH, M., L. M. ROTH, and T. E. FISNER. The allure of the female mosquito. Natural History, 75:26 (December 1966).
- 408. ROWLEY, D. B., and H. S. LEVINSON Changes in spores of <u>Bacillus</u> megaterium treated with thicglycolate at a low pH and restoration of germinability and hear resistance by cations. J. Bact., 93:1017 (March 1967).
- 40°. SHIBATA, Y., and M. J. KRONMAN. Inactivation of glyceraldehyde 3-phosphate dehydrogenase. Arch Biochem. e: Biophys., 118(2):410 (February 1967).
- 410. SIMMONS, E. G. Typification of Alternaria, Stemphylium, and Ulocladium. Mycologia, 59(1):67 (January-February 1967).
- 411. TANENHOLTZ, S. D. A versatile photo-optical system for the study of ballistic phenomena. J. Soc. Photo-optical Instrumentation Engrs., 5(2):54 (December 1966-January 1967).
- 412. WALSH, J. T., and D. M. ROSIE. Studies of the gas density cell.

 J. Gas Chromatography, 5(5):232 (May 1967).
- 413. WESTWOOD, J. H., R. C. CHALK, D. H. BALL, and L. LONG, JR. Syntheses of 6-deoxy-2,4-di-O-methyl-D-galactose (Labilose) and of 2,4-di-O-methyl-D-galactose. J. Org. Chem., 32(5):1643 (May 1967).
- 414. WHARTON, D. R. A., M. BAZINET, and M. L. WHARTON. A leak-proof argon ionization detector cell. J. Gas Chromatography, 4(9):353 (September 1966).
- 415. J. E. LOLA, and M. L. WHARTON. Population density survival growth and development of the American cockroach, J. Insect. Physiol., 13(5):699 (May 1967).

Tec'nical Papers

- 416. ALTENAU, A. G., and C. MERRITT, JR. Selected copper-amine complexes as stationary phases. American Chemical Society. New York, N. Y., September 1966.
- 417. BAZINET, M. L. Analysis of natural products with the time of flight mass spectrometer. Eighth Annual Time of Flight Wass Spectrometer Symposium, Cincinnati, Ohio, September 1366.
- 418. , C. MERRITT, JR., J. I. MASTERS, P. VOUROS, and J. P. CLUNE. The evaporated silver bromide film as a detector for organic ions. 15th Annual Conference on Mass Spectrometry and Allied Topics, Denver, Colo.. May 1967.
- 419. FREER, J. H., and H. S. LEVINSON. Fine structure of <u>Bacillus</u> megaterium during microcycle sporogenesis. American Society for Microbiology, New York, N. Y., May 1907.
- 420. HARTMAN, H. B. Functional organization of the Crustacean proprioceptor, the Propus-dactylus organ. Seminar. Marine Biological Laboratory, Woods Hole, Mass., July 1966.
- 421. Functional organization of the Propvl-dactvlus organ in decapod Crustacea, University of Iowa, Iowa Citv, Iowa, March 1967.
- Relationship of structure and function of the Crustacean propioceptor, the Propus-dactylus organ. Seminar, Vanderbilt University, Nashville, Tenn., October 1966.
- 423. Stridulation of the cockroach Nauphoeta cinerea during courtship behavior. American Association for Advancement of Science, Washington, D. C., December 1/00, and State University College of New York, Brockport, N. Y. February 1967
- 424. Structure and function in a Crustacean proprioceptor, the Propus-dactylus organ, University of Rhode Island, Kingston R. I. March 1967.
- 425. HAYON, E. Absorption spectra and reaction kinetics of inorganic radicals. Seminar, Boston University, Boston, Mass., February 1967.

Technical Papers (continued)

- 426. HAYON, E. Electron spin resonance study of the radiolysis of low temperature organic glasses. Seminar, University of Wisconsin, Madison, Wis., May 1967.
- Flash photolysis studies of some inorganic ions in aqueous solutions. Institute of Physical Chemistry, Uppsala University, Sweden, September 1900.
- 428. Radical yields in the radiation chemistry of water.

 Fifth informal symposium on Radiation Chemistry of Water,
 Notre Dame University, South Bend, Ind., October 1966.
- 429. Radical recombination reactions in radiation chemistry.

 Brandeis University, Waltham, Mass., December 1960.
- 430. Some recent aspects of the radiation chemistry of aqueous systems. Symposium on Radiation and Photochemistry, Northeastern Section, American Chemical Society, Cambridge, Mass., May 1967.
- 431. HEINMETS, F. Studies on cell growth regulation: Analog computer analysis of a model system. Symposium on Recent Developments in Research Methods and Instrumentation. National Institutes of Health, Bethesda, Md., October 1966.
- 432. HOGE, H. J. Problems encountered in the generation of standard reference data in the physical sciences-general considerations. Gordon Research Conference on The Numerical Data of Science and Technology, Enumelaw, Wash., August 1900.
- 433. HYATT, M., P. K. HOLMES, and H. LEVINSON. Activation of B. megaterium spore germination by water vapor and by aqueous ethanol. American Society for Microbiology, New York, N. Y., May 1967.
- 434. JACOBS, H. L. Sensory and metabolic regulation of food intake.
 Plenary Session, VII International Conference of Nutrition.
 Hamburg, Germany, August 1900.
- Sensory and metabolic signals in the regulation of food intake. Conference on Neural Regulation of Food and Water Intake. New York Academy of Sciences, New York, N. Y., February 1967.

Technical Papers (continued)

- 436. JACOBS, H. L. The regulation of food and water intake: Glucose appetite and the problem of satiety. Seminar, Army Research Office (ARO), Life Sciences Group, Arlington. Va., December 1966.
- 437. KAPLAN, A. M. Germicides for water purification, fresh fruits and vegetables, mess gear and surfaces. Surgeon General's Reserve Officers' Training Program in Military Nutrition, U. S. Army Natick Laboratories, Natick, Mass., July 1966.
- 438. Microbial degradation process in coated fabrics.

 Symposium, Research on Coated Fabrics, Fort Belvoir, Va..

 April 1967.
- Prevention of microbiological deterioration of materials in the United States present state of the art. Bond voor Materialemkennis (Society for Materials Science), Utrecht, The Netherlands, November 1966.
- 440. KRONMAN, M. J. The molecular conformational changes of alpha lactalbumin. Johns Hopkins University, Baltimore, Md., October 1966.
- 441. Reaction of N-bromo-succinimide with lysozyme. Federation of American Societies for Experimental Biology, Chicago, Ill., April 1967.
- 442. MERRITT, C., JR. Advances in combined gas chromatography and mass spectrometry. Gas Chromatography Discussion Group, Washington. D. C., November 1960.
- d43. Combined gas chro tographic and mass spectrometric techniques for the study of radiation effects on food and food substances. Seminar, Max Planck Institut fur Kohlenforschung, Mulheim am Ruhr, Germany, September 1966.
- Combined mass sectrometer Gas chromatographic techniques. Seminar, Sandox, A. G., Basle, Switzerland, September 1966.
- Detection and identification of volatile flavor components. Nutmeg Section, Institute of Food Technologists, East Norwalk, Conn., April 1967.

Technical Papers (continued)

- 446. MERRITT, C., JR. The mass spectrometer in functional group analysis. Eighth Eastern Analytical Symposium, New York, N. Y., November 1966.
- Spectrometric identification of compounds isolated from natural products. Seminar, Army Research Institute for Environmental Medicine, Natick, Mass., February 1967.
- 448. , P. ISSENBERG, and M. L. BAZINET. Performance of a direct coupled real time spectrum digitizer and a rapid scanning high resolution mass spectrometer. 15th Annual Conference on Mass Spectrometry and Allied Topics, Denver, Colo., May 1967.
- and D. H. ROBERTSON. The analysis of proteins, peptides, and amino acids by pyrolysis gas chromatography and mass spectrometry. International Symposium on Pyrolysis Gas Chromatography, Paris, France, September 1966.
- and D. H. ROBERTSON. The use of complex metal hydrides in reductive cleavage reactions on amino acids, peptides and protein. American Chemical Society, Miami Beach, Fla., April 1967.
- 451. D. H. ROBERTSON, and D. J. McADOO. The identification of volatile compounds in coffee. American Chemical Society, New York, N. Y., September 1966.
- 452. and J. T. WALSH. Multichannel open tubular columns.

 Fourth International Symposium, Advances in Gas Chromatography.

 New York, N. Y., April 1967.
- 453. PARRISH, F. W. Glycosides and antibiotics. Course in Carbohydrate Chemistry and Biochemistry, New York Medical College. New York. N. Y., November 1966.
- 454. REESE, E. T. Carbohydrases. Course in Carbohydrate Chemistry and Biochemistry, New York Medical College, New York, N. Y., November 1966.
- 455. ROBERTSON D. H., and C. MERRITT, JR. Some studies in the thermal degradation of amino acids, peptides, and proteins. International Symposium on Macromolecular Chemistry, International Union of Pure and Applied Chemistry, Tokyo, and the Chemical Society of Japan, Kyoto, Japan, October 1966.

Technical Papers (continued)

- 456. ROGERS, M. R. Biodegradation of detergents. Surgeon General's Reserve Officers' Training Program in Military Nutrition, U. S. Army Natick Laboratories, Natick, Mass., July 1966.
- 457. ROTH, L. M. The evolution of reproduction in cockroaches. University of Connecticut, Storrs. Conn., November 1966.
- 458. Sound production and its evolutionary significance in the Blattaria. Entomological Society of America, Portland, Ore., December 1966.
- 459. ZAGIEBOYLO, W. Shock-wave interaction with air-supported structures. Society of Experimental Stress Analysis, Pittsburg, Pa., November 1966.

Book Chapters

- 460. BAZINET, M. L., and C. MERRITT, JR. Mass spectrometry. In Encyclopedia of industrial Methods of Analysis, Vol. II, John Wiley and Sons, New York, N. Y. (1966).
- 461. JACOBS, H. L. Taste and the role of experience in the regulation of food intake. In The Chemical Senses and Nutrition, Fart III. Johns Hopkins Press. Baltimore, Md. (1907).
- 462. LOCONTI, J. D. Bulk purification. <u>In Fractional Solidification</u>, Vol. I. M. Zief and W. R. Wilcox (edit.). Marcel Dekker, Inc., New York, N. Y. (1967).
- 463. MERRITT, C., JR. Gas chromatography. <u>In Encyclopedia of Industrial Methods of Analysis</u>, Vol. II. John Wiley and Sons. New York. N. Y. (1960).
- 464.

 , P. ANGELINI, D. McADOO, and M. BAZINET. Irradiation damage in lipids. In Flavor Chemistry Monograph, Advances in Chemistry Series, No. 55, American Chemical Society, Washington.

 D. C. (1966).
- 465. REESE, E. T., and M. MANDELS. Beta-glucanases other than cellulases.

 In Methods in Enzymology, Vol. VII, Colowick and Kaplan (edit),

 Academic Press, New York, N. Y. (1966).

Book Chapters (continued)

- 466. ROTH, L. M. Male pheromones. In Yearbook of Science and Technology for 1907, p.293, McGraw-Hill, New York, N. Y. (1967).
- 407. WALSH, J., and C. MERRITT, JR. Multichannel open tube columns.

 In Advances in Gas Chromatography, A. Zlatkis (edit.). Proc.
 Fourth International Symposium, New York, N. Y., p.48, 3-6 April
 1967, Preston Tech. Abst. Co., Evanston, III. (1967).

Book Reviews

- 458. JACOBS, H. L. The rat, S. A. Barnett (edit.), Chicago, Ill. Aldine. Am. J. Psychol., 79:512 (September 1966).
- 409. LEVINSON, H. S. Spores Their dormancy and germination, A. S. Sussman and H. O. Halvorsen (edit.). In Quarterly Rev ew of Biology, 42:318 (June 1967).

Other Publications

- 470. JACOBS, H. L. Sensory and metabolic regulation of food intake: Thoughts on a dual system regulated by energy balance. Proc. Seventh International Nutrition Congress, Vol. II (1967).
- 471. KAPLAN, A. M. Prevention of microbiological deterioration of materials in the United States Present state of the art. TNO-Nieuws, The Netherlands (June 1967).
- 472. LONG, L., JR., C. H. TROTTIER, M. R. ROGERS, and A. M. KAPLAN. Biodegradable detergents. Proc. Army Science Conference, Vol. II, West Point, N. Y. (1966).
- 473. MERRITT, C., JR. Chemical changes induced by irradiation in meats and meat components. Proc. Joint International Symposium on Food Irradiation, International Atomic Energy Agency/Food and Agriculture Organization of the United Nations, Vienna, Austria (1966).
- 474. ROBERTSON, D. H., and C. MERRITT, JR. Some studies in the thermal degradation of amino acids, peptides and proteins. Proc. International Symposium on Macromolecular Chemistry, International Union of Pure and Applied Chemistry, and the Chemical Society of Japan, 11:35 1966).

Other Publications (continued)

475. WEINSTEIN, J., A. L. BLUHM, M. E. LANGMUIR, and E. T. STROM. Light attenuation by photochemical means Photochromism. Proc. Army Science Conference, Vol. II, West Point, N. Y. (1966).

INDEX TO AUTHORS (Entry Number)

Ahmed, N. 141 Allison, S. W. 69 Altenau, A. G. 369, 416 Anderson, E. E. 208, 282 Andreotti, R. E. 403 Andrews, R. B. Jr. 69 Anellis, A. 175, 176, 186, 206, 207 Angelini, P. 370, 381, 399, 464 Angelo, P. J. Jr. 52 Anstey, R. L. 136, 137, 142, 157, 158 Anti, A. W. 177, 208 Bailey, M. E. 165 Baker, L. J. 209 Ball, D. H. 373, 413 Ball, G. L. III 61 Barrett, F. F. 185 Barron, E. 67 Barth, R. H. Jr. 406 Batchelder, W. 250 Bazinet, M. L. 370, 381, 399, 414, 417, 418, 448, 460, 464 Beary, E. G. 25, 26 Berger, A. W. 109 Berkowitz, D. 175, 176 Bishov, S. J. 178, 179 Bissett, F. H. 375 Bivona, W. A. 29, 32 Blackford, P. A. 138 Bladel, B. O. 186 Blati, W. F. 371 Bluhm, A. L. 475 Borrero, C. 335 Brannon, D. R. 372 Brazil, T. 210 Breslouf, L. M. 252 180, 181, 182, 211, 212. Brockman, M. C. 213 Brownell, G. L. 172, 183, 220, 221

Brynjolfsson, A. 214, 215, 216, 242

Buck, P. A. 217

Agams, G. 90

Burkhardt, J. L. 193 urns, M. 67 Burrows, B. A. 194 Burrows, W. D. 79, 80, 92 Burse, R. L. 365 Calhoun, W. K. 251 Cannon, E. T. 78 Cardarelli, J. A. 194 Carey, F. A. 373 Carwile, L. C. K. 368 Cecil, S. R. 339 Chabot, R. S. 322, 343 Chalk, R. C. 413 Chambers, J. V. 135 Chandler, H. K. 218 Chang, Y. 198, 199, 281 Chen, F. C. 374 Clapp, R. C. 375 Clifford, M. 195 Clough, S. B. 73, 9C, 93, 94 Clune, J. P. 418 Coburn, R. A. 375, 376

Budnick, M. L. 37

Cole, M. S. 168
Coleman, I. 74
Coleman, R. A. 75
Connolly, P. J. 326
Cooper, R. D. 172, 183, 194, 219,

220, 221

Criz, D. S. 282 Crowley, N. H. 222

Dalrymple, P. C. 130, 139, 153, 154
Daluz, D. 51
Daniels, F. J. A. 127
Darby, M. E. 57, 64
Dateo, G. P. 377
Davidsohn, W. 81, 84
deMolenaar, J. G. 127
DeSantis, G. D. 34, 38

Desper, C. R. 82, 95, 96
Dietz, A. B. 322. 343
DiPaolo, M. 51
DiPietro, C. 83
Dcdd, A. V. 143
Donovar, P. 185
Diake, B. 243
Drakesmith, F. 68
Driver, M. 244
Dusablon, L. V. 72, 113
Duxbury, V. 52
Dymsza, H. A. 184, 185, 201, 223, 224

Jisner, T. E. 407 il-Bisi, H. M. 175, 176, 198, 199, 225, 226, 227, 228, 229, 230, 231, 232, 281, 313, 314

Ender, D. H. 69 Erhardt, P. F. 90 Evans, M. E. 378, 379

Falabella, G. 39 Ferm, R. L. 336 Fertman, N. H. 325 Fisher, L. 58 Flanagan, J. H. 16 Flentge, R. L. 251 Florentine, G. J. 380 Forss, D. A. 370, 381, 399 Franke, F. W. 327 Frankfurt, J. H. 310 Franklin, D. 323 Freer, J. H. 419 Freeston, W. D. Jr. 321 Frodigh, R. J. 132, 159 Fujinaka, E. S. 46, 66

Gagliardi, D. D. 50
Garber, E. B. 394
Gertel, M. 323
Giddings, G. G. 233, 234
Giffee, J. W. 202
Gionfriddo, M. P. 33, 40, 41
Goldblum, E. J. 29
Goodwin, J. A. 52
Green, C. R. 163
Greenberg, R. A. 186

Greenwald, A. 143 Gurne, A. B. 382

Hagen, P. 383 Harlan, J. W. 245, 246, 306 Hartman, H. B. 384, 385, 420, 121, 422, 423, 424 236, 387, 425, 526 427. Hayon, E. 428, 429, 430 Heiligman, F. 187, 196, 234, 306. 312, 346 Heinmets, F. 388, 431 Helmer, R. L. 293 Henick, A. S. 178, 179, 195 Henry, M. C. 76, 31, 83, 84, 97 Heyes, J. 68 Hildebrandt, A. C. Hilmas, D. E. 302 Hinnergardt, L. 293 Hoffman, A. 111, 112 Hoge, H. J. 368, 389, 390, 432 Hogue, D. W. 129 Hollender, H. A. 166, 235, 260, 262 Holmes, L. G. 393, 403 Holmes, P. K. 301, 433 Hooft, J. J. 127 Hopfenberg, H. B. 205 Howell, D. M. Hu, K. H. 351, 352 Hyatt, M. T. 391, 433

Information Dynamics Corp. 27, 28 Ipson, T. P. 70 Issenberg, P. 448

Jackson, R. H. 109
Jacobs, H. L. 434, 435, 436, 461, 468, 470

Jarboe, C. 175, 176

Jarrett, R. D. Sr. 307, 308

Javier, V. 59

Johnson, A. N. 63

Johnson, K. R. 282

Josephson, E. S. 188, 236, 237, 238, 239, 240, 241, 242, 305, 309, 310, 315, 316, 317, 318

Kamen, J. M. Lockhart, J. M. 395 Loconti, J. D. 462 Lo1a, J. E. 415 Kane, F. 30° Kantack, B. H. 397 Kapala, T. 42, 60 Long, L. Jr. 372, 373, 375, 376, 379, Kaplan, A. M. 367, 437, 438, 439, 471, 413, 472 472 Lunsford, E. 35, 36 Kapsalis, J. G. 169, 243, 244 Karel, M. 164 Kauffman, F. L. 245, 246, 306 MacDonald, J. L. 66 Kazan, J. 75 MacNair, R. N. 65, 71, 106 Kennedy, S. J. 98, 99, 100, 101, 102, Madnick, H. 51, 53 Mandels, G. R. 396 103 Kenyon, E. M. 247, 248 Mandels, M. 311, 465 Killoran, J. J. 196, 249, 344, 345, Mantz, W. M. 1, 2, 3, 4, 5, 6, 7 346, 353, 354, 355 Markarian, H. 364, 397 Marks, A. M. 49 Kilmore, M. A. 250, 251, 252 Martin, D. M. 105 Kimmel, R. M. 69 Martin, R. L. 30, 31, 32 Kittaka, R. S. 186 Klicka, M. V. 166, 235, 253, 254, 255, Martin, T. G. III 216, 265 Mason, M. 74, 75 256, 257, 258, 259, 260, Masters, J. I. 418 262 Masuoka, Y. 179 Kliman, M. I. 104 Matthern, R. O. 189, 266 Kneeland, L. E. 196, 346 Roerner von Gustorf, E. 83 Maunder, D. 354 Kohn, R. 261 McAdoo, D. J. 451, 464 McCormick, J. 251, 252 Koza, W. 51 Krause, G. F. 165 McDonald, J. L. 46 McGarvey, J. J. 387, 398 Kroll, B. J. 362 Kronman, M. J. 392, 393, 403, 409, McGeachin, R. L. 190 McGoff, M. J. 47 440, 441 McGrath, W. 398 Kuo, M. H. 366 McIsaac, H. J. 62 McKeown, C. J. 340 Labadan, R. M. 125, 126 McLean, R. J. 48 Lachance, P. A. 185, 235, 260, 262 McQuade, A. J. 107 Lacher, J. R. 77 Mehlman, M. A. 201 Mehrlich, F. P. 191, 267, 268, 269, Laliberte, B. 84 270, 271, 272, 273, Lampi, R. A. 338, 347 Landers, M. K. 312 274, 319 Langmuir, M. E. 475 Mendoza, C. E. 125 Lastnik, 1. L. 55 Mercer, J. H. 133 Lee, F. H. 263, 264 369, 370, 381, 399, Merritt, C. Jr. Lee, R. J. 363 400, 404, 416, 418, 442, 443, 444, 445, Lemmon, D. H. 88 Lettau, H. H. 130, 154 446, 447, 448, 449, 450, 451, 452, 455, 460, 463, 464, 467, Levin, R. E. 313 Levinson, H. S. 200, 391, 394, 408,

Merritt, G. J.

473, 474

- - - 5

419, 433, 469

Linekin, D. M. 220, 221

Meyer, R. A. 192, 193
Michel, A. A. 161
Miles, T. D. 108
Milich, N. 47
Miller, A. G. 330, 333, 342
Miller, E. J. 134
Miller, F. A. 88
Miller, S. A. 224
Mink, L. D. 173
Misaki, S. 68
Mone, P. F. 173
Mulvey, P. F. 104

Nebesky, E. A. 348, 349, 350, 356. 357, 358, 360

O'Connor, E. 275 Oesterling, J. F. 17 Oliver, A. 68

Pant, B. 76
Park, A. 53
Park, J. D. 77
Parrish, F. W. 372, 378, 379, 401, 402, 453

Patter, N. Jr. 131 Pavord, N. M. 190 Perry, D. 68 Perry, J. C. 342 Peryam, D B. 362 Peryam, D. R. 302 Peters, J. R. 43 Peterson, M. S. 348, 349, 350 Pfister, D. H. 52 Pflug, I. J. 335 Phillips, C. E. 187, 276 Pirog, J. A. 109 Pooley, R. 58 Porter, W. L. 195 Pratt, G. B. 196, 346, 364, 397 Prell, P. A. 190, 277 Previte, J. J. 197, 198, 199, 278, 279, 280, 281 Prifti, J. K. 329, 342 Proffitt, R. B. 322, 343 Prosser, R. A. 85

Pustinger, J. V. 61

Rahman, A. R. 282 Ramsdell, F. 54 Ramsley, A. O. 50, 80, 87 Rauch, A. C. 283 Reese, E. T. 511, 274, 383, 401 402, 454, 465 Reitan, C. H. 163 Relyea, D. I. 63 Riordan, C. T. 8, 4, 10 11, 12. 13, 14, 15 Robbins, F. M. 371 393, 403 Robertson, D. H. 400, 404, 449, 450. 451, 455, 474 Robinson, S. M. 371 Robison, W. C. 144, 145, 155, 156 103 Rodzen, R. o7 Rogers, M. R. 456, 472 Rohs, C. S. 58 Rosie, D. M. 412 Ross, E. W. Jr. 24 Roth, L. M. 377, 382, 384, *85, 405. 400, 407, 457, 158, 46n Roth, M. 407 Rowley, D. B. 200, 408

Sacher, R. E. 83, 88, 110 Salyer. I. O. ol Santoro, L. 250 Saravis, C. A. 371 Sayers, D. 05 Schmidt, T. R. 284, 285, 286, 287 Schneider, N. S. 72, 73, 93, 94, 111. 112, 113, 1 4 Scribano, F. 57 Scroges, R. W. 167 Sebring, R. E. 321 Segars, R. A. 389, 390 Seligsberger, L. 29 Shahane, S. D. 44 Sharon, D. 146 Shaw, A. I'I 58 Shaw, D. B. 341 Shea, K. G. 318 Shibata, Y. 409 Shults, G. W. 288, 289

Shurtleff, S. J. 114 Sieling, D. 4. 18, 19, 20, 21, 22, 23 Simon, M. 312 Simmons, E. G. 410 Singh, V. 44 Sinnhuber, R. O. 312 Smith. H. P. 63 Snyder, A. P. 42 Snyder, O. P. 313 Spano, L. A. 72, 73, 113, 115 Stamm, O. H. 383 Stapler, J. T. 85 Stein, R. S. 82, 90 Stewart, O. J. 68 Stoewsand, G. S. 184, 185, 201, 224 290 Strain, T. C. 334 Strasser, J. 202, 201 Strom, E. T. 475 Stroschein, L. 139, 147, 148 Swain, D. 48 Swift, J. 203 Swift, S. M. 201, 250

Tandon, J. P. c8 Tanenholtz, S. D. 411 Tannenbaum, S. R. 164 Tarrant, P. 68 Texas Instruments, Inc. Therriault, D. G. 201 Thibodeau, H. W. 337 Thomas, B. B. 328 Thompson, W. F. 140 Tollenaar, D. 204 Tompkin, R. B. 170, 186 Traskas, R. 111, 112 Travis, B. V. 125, 126 Trottier, C. H. 472 Trueblood, L. W. 149, 150, 160 Tumeinski, R. F. 334 Tuomy, J. M. 292, 293

Umina, A. P. 210, 294 Urbanek, J. P. 116

Vega, M. 75 Venetos, M. A. 359, 361 Vindsberg, S B. 331, 332 Vitols, R. 396 Vondel, R. 4. 314 Votta, F. r. 72 Vouros, P. 418

Wadsworth, C. k. 187, 305 Waldron, E. T. 51 Walker, J. E. 205, 244 Walsh, J. T. 412, 52, 467 Walwood, J. T. 56 Wassarman, P. 314 Weiner, L. I. 44, 45 Weinstein, J. 475 Wells, F. E. 174 Wells, R. D. 117, 118 Westcott, D. E. 210, 295, 296, 297 Westwood, J. H. 413 Wexler, R. L. 151 Wharton, D. R. A. 414, 415 Wharton, M. L. 414, 415 Wheeler, J. F. 324 White, V. M. 298, 290, 300, 301 Whitney, W. 60 Whitehair, L. A. 302 Widmer, D. N. 190 Wierbicki, E. 233, 242, 245, 246, 249, 288, 289, 303, 304, 305 320, 355 Wilde, A. F. 119, 120 Wiley, S. J. 372 Williams L. 128, 152, 161 Wilson, A. 91, 121, 122 Wilson, H. S. 61 Witte, V. C. 165 Wittrock, E. P. 70 Wolf, M. 244 Wolleston, S. H. 130, 154

Wright, A. C. 68
Yelland, W. E. C. 85, 123

Zagieboylo, W. 459 Zoukis, M. 194

Woodroof, J. G. 33a

Wright, A. 68

Yu. T. C. 312

	MENT CONTROL DATA				
Security classification of title, body of abatrac	t and indexing annetation wat				
GINATING ACTIVITY (Componete author)		M. REPORT SECURITY CLASSIFICATION			
US Army Natick Laboratories	ories		inclassified		
Natick, Massachusetts 01700		20. GROUP			
notice, massachasetts of to	merach, massachusetts Uliuu				
REPORT TITLE					
BIBLIOGRAPHY OF TECHNICAL PUBLI	ICATIONS AND PAPERS				
DESCRIPTIVE NOTES (Type of report and Inclusive de	letre)				
July 1900 - June 1967					
AUTHORIS: (Pirat name, middle initial, last name)					
RFPORT DAYE	7a. TOTAL N		75. 40 OF REFS		
July 1957	1	55			
CONTRACT OR GRANT NO	SA. ORIGINA	OR'S REPORT 4U	/BER.D)		
		_			
. PRUJECT NO		58-1			
	M CTHES B	PORT NOISI (Am	other numbers that may be yes		
	Gd. report		, 		
DISTRIBUTION STATEMENT					
SUPPLEMENTARY NOTES	l	U. S. Army Natick Laboratoric Natick, Massachusetts 01760			
	1				
ABSTRACT					
ABSTRACT					
A bibliographic listing of personnel of the U. S. Army Man period July 1966 through June 1	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U.S. Army Man	ι ck Laboratories a				
A bibliographic listing of personnel of the U. S. Army Man	ι ck Laboratories a				

Security Classification

inclassified

inclassified Security Classification						
*4 KEY PORDS	L/M	LINE		LINEC		
	BOLE	• 7	*0.E	*7	.0	
			!			
Research						
Reports	`		!!			
Publications			1 1			
Development	`					
Arms Natick Laboratories	•		! [
Bibliographies	,		.			
			i 1			
	Ì)			
					1	
					1	
			i i		i	
			: !			
	i					
			; l] [
			i I			
			i I			
]			
			! !			
•	l		1		i	
			l i		i i	
					!	
			İ			
	i					
					j l	
					!!	
					İ	
					<u> </u>	
					l i	
			l			
					i 1	

chara sing o